



sri venkateshwaraa

Group of Institutions

CREATING HEALTHIER SOCIETY

Ariyur, Puducherry-605102



Date: 28-03-2025 (Friday)

Venue: Sai Auditorium, SVMCH & RC

Theme: Innovation in Healthcare Technology

CHIEF PATRONS



Shri. B. RAMACHANDIRAN
Chairman,
SVGI



Mr. A.R. RAJIVKRISHNA
Managing Director,
SVGI

PATRONS



Dr. B. VIDHVA
Chief Operating Officer,
SVGI



Dr. S. RATNASAMY, B.Sc., M.S.,
Director
SVMCH&RC



Dr. G. JOSEPHRAJ,
M.S., M.Ch (CTS) Ph.D. MRCPs., FIMSA., FAIS.
MEDICAL SUPERINTENDENT
SVMCH&RC

CO-PATRONS

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Principal – SVDC

Dr. JAVARAMAN RAJANGAM
Principal – SVCP

Dr. S. PRADEEP DEVANEVAN
Principal – SVCET

Dr. C. ANANDA VAVARAVEL
Principal – SVC PMS

Dr. PROF. MALLIGA .M
Principal – ICON

Dr. PROF. S. JEYANTHI
Principal – SVC OPT

CHIEF GUEST



Prof. GOVINDASAMY KUMARAMANIKAVEL, MD.,
Research Director, Narayana Nethralaya,
Bangalore, India.

ORGANIZING TEAM

ORGANIZING CHAIRPERSON

Dr. PAAPA DASARI,
MD, DGO, PDCR, FRM, FICOG
Dean Research & PG Academics
SVMCH&RC

CO- ORGANIZING CHAIRPERSON

Dr. JEYANTHI,
Associate Dean Research
SVGI

All Research Coordinators,
SVGI

ORGANIZING SECRETARY

Dr. PRIYATHARSHINI,
SRC Chairman

TREASURER

Dr. LAVANYA,
IEC Member Secretary
SVMCH&

PROGRAMME SHEDULE

TIME	AGENDA
08.30am – 09.00am	Registration
09.00am – 10.30am	Award Papers SVGI Faculty Oral Presentation
10.30am – 11.15am	Inauguration
11.15am – 11.30am	TEA BREAK
11.30am – 12.15pm	Scientific talk 1 Guest of Honour : Dr.Reena Gulati MD.,DM., Professor Department of Paediatrics, JIPMER
12.15pm – 1.00pm	Scientific talk 2 Guest of Honour : Dr. R. Sathishkumar Principal Research Scientist, Indian Institute of Science, Bangalore
01.00pm – 02.00pm	LUNCH BREAK.
02.00pm – 03.30pm	Award Papers Oral presentation by UG/ PG students
03.30pm – 03.45pm	TEA BREAK
03.45pm – 04.00pm	Valedictory Ceremony
04.00pm – 04:10pm	Vote of thanks
04.10pm	National Anthem

SCIENTIFIC COMMITEE

Prof. S. MAHADEVAN, Prof. G. JOSEPHRAJ, Prof. SURESH , Prof. RAJA SEKAR,
Prof. SAXENA, Prof. SURENDAR R
All HOD'S ofSVGI

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***Central
Research
Committee -
SVGI***

Central Research Committee (CRC) of SVGI

With the vision of our Chairman Sir, CRC was formed in July 2025 with the following goals.

- ▶ To promote Collaborative Research among all SVGI faculties and students including Engineering and Technology
- ▶ To support and fund Research activities of students and faculty
- ▶ To promote International collaborative projects
- ▶ To encourage innovations in the field of Medicine, and allied health sciences as well as Engineering

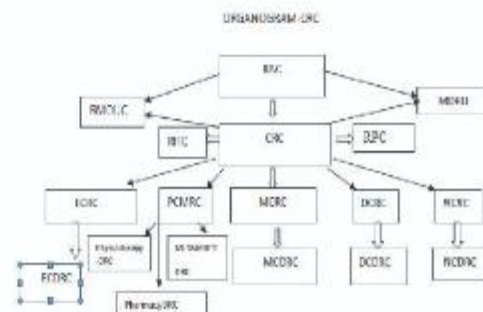
Constituted as per the RDC Guidelines,
University Grants Commission, 2022

Constitution of CRC with all Colleges of SVGI

It has an Advisory Committee RAC, 5 Independent Committees (2 to 6) and 5 Combined committees.

Independent committees will have Departmental Research Committee (DRC) where Research Projects are initiated and finalized before submitting to SRC (Scientific Research Committee of respective Colleges)

1. Research Advisory Committee (RAC)
2. Medical College Research Committee (MCRC)
3. Dental College Research Committee (DCRC)
4. Nursing College Research Committee (NCRC)
5. Paramedical Colleges Research Committee (PCMRC)
(College of Physiotherapy, College of MLT & MRIT, College of Pharmacy,)
6. Engineering College Research Committee (ECRC)
7. Research Mou Committee (RMOUC)
8. Multidisciplinary Research Unit (MDRU)
9. Research Infrastructure And Finance Committee (RIFC)
10. Research Publication committee (RPC)



Research Advisory Committee (RAC)

(For improving the quality of Research)

CONSTITUTION AND FUNCTIONS

Research Advisory Committee (RAC) is the central body and consists of Chairman SVGI, Executive Director SVGI, Chief Operating Officer (COO) SVGI, Director, MS & Dean of Medical College Hospital and Research Centre, and Principals of all the SVGI colleges, External Research Experts from National and International Institutes of Research who are retired or currently holding any positions in Research or Academics.

Head of RAC : Chairman SVGI: Shri.B.Ramachandiran

CO-Chairman : COO SVGI: Dr.B.Vidhya Rangaraju

Executive Director: Shri.A.R.RajivKrishna

Members:

- ▶ Director MCRC
- ▶ Dean Research and PG Academics
- ▶ Medical Superintendent, MCRC
- ▶ VP UG Studies
- ▶ Principal Dental College
- ▶ Principal Engineering College
- ▶ Principal Paramedical College
- ▶ Principal College of Nursing
- ▶ Principal College of Physiotherapy
- ▶ Principal College of Pharmacy

External Research Experts:

International:

Prof. Sudesh Kumar MD, MRCP., FRCP:
Professor of Medicine and Former Dean of
Warwick University, UK.

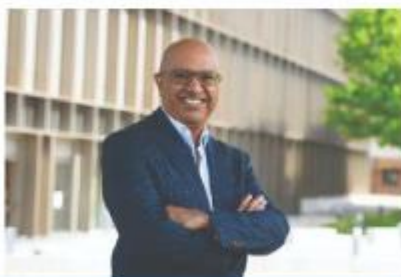
2. Dr . Mariano, M, Director, CARE Fertility.
LEEDS, UK.

National Research Experts:

1.Dr. Mohan Kamath. Prof. Reproductive
Medicine , CMC., Vellore

2.Dr. Adishivam DCH, PhD. Prof
Neonatology, JIPMER, Puducherry

Profile of External Expert



Prof. Sudesh Kumar

MRCP (UK): March 1990.
M.D.: University of Manchester
(1994)
FRCP (London): May 1999
FRCPATH: February 2009

➤ Currently -Vice President
(Health) and a member of the
senior management team
Warwick University , UK

➤ Former Professor of
Medicine in 2003 and he was
Dean of the Warwick Medical
School at University of
Warwick from 2015 until
August 2023
Non-Executive Director on the
University Hospital Coventry &
Warwickshire NHS Trust Board

Roles and Responsibilities of RAC:

- ▶ **To provide Inputs for Quality research and advice and facilitation on collaborations with other Institutes.**
- ▶ Participate through online meetings every 4-5 months apart from contributing via e mails as and when expert advice is required.
- ▶ **Research training and capacity building** : Develop and implement to enhance research skills, including workshops, seminars, training programs, and mentorship opportunities for faculty and students.
- ▶ **Collaborating and networking** – to foster collaborations and partnerships with other research institutions, organizations and industry stakeholders to promote interdisciplinary and multidisciplinary research and leverage additional resources and expertise.
- ▶ **Research Dissemination and Publication** – encourage and support the publication and dissemination of research findings through scientific conferences, journals and other appropriate channels. Provide guidance on publication ethics and responsible authorship.
- ▶ MOUs of Research Collaborations
- ▶ Facilitation of Mult-centric Projects
- ▶ Approval of Research Training Programmes for all Researchers
- ▶ Approval of Research Funds
- ▶ Approval of instituting New Research Awards
- ▶ Approval of Research Day Celebrations



sri venkateshwaraa

Medical College Hospital and Research Centre

CREATING HEALTHIER SOCIETY

Ariyur, Puducherry - 605 102



HEARTY CONGRATULATIONS, TO OUR CHAIRMAN SHRI.B.RAMACHANDIRAN

FOR RECEIVING

“EDUCATION CHANGE MAKER AWARD”

FROM THE CHIEF MINISTER OF PUDUCHERRY ON

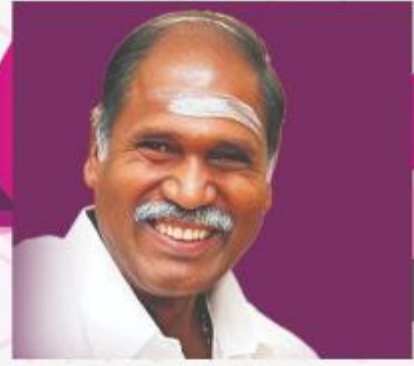
8th OCTOBER 2024



www.svmchrc.ac.in

Message From

Chief Minister



N. RANGASAMY

N. RANGASAMY

CHIEF MINISTER
GOVERNMENT OF PUDUCHERRY



PONDICHERRY

Date 27.3.2025

MESSAGE

I am very pleased to learn that Sri Venkateshwraa group of Institutions (SVGI) under the Chairmanship of Shri B. Ramachandran is celebrating Research Day 2025 on 28th of this month.

I am happy to know that the scientific deliberations involve the experts in the field of Research at the National Level. The group of Institutions in the rural area of our Union Territory is contributing to Health care, Engineering and Technology, involving not only Medical College but also Nursing, Paramedical Sciences, Pharmacy and Dental Sciences.

By promoting Research collaborations among all the Institutions, the SVGI has rightly coined the theme of the Research Day as "Innovation in Health Care Technology" which is appropriate in this era of Digital Health and developing World of Artificial Intelligence in to the Health care delivery systems. The SVGI are one of the best group of institutions bringing out the students with flying colours who are placed in good positions in various parts of the World.

I hope that the deliberations on this Research Day would inspire many Young minds to excel in Research. I wish all the students, faculty and management a successful Year and best future in the field of Research and Education.


(N. RANGASAMY)

Message Form

Chairman



Shri. B. RAMACHANDIRAN

With immense pride and enthusiasm, I extend my warmest greetings to all faculty members, researchers, and students on the occasion of Research Day 2025. This event stands as a testament to our institution's unwavering commitment to academic excellence, innovation, and interdisciplinary research.

As an institution encompassing both Health Care and Engineering Sciences and Technology, we are uniquely positioned to foster collaboration across diverse fields. Research serves as the bridge between knowledge and transformation, and it is through such academic endeavors, we contribute meaningfully to society, advance healthcare, and drive technological progress.

I commend the dedication of our faculty and students who continue to push boundaries, explore novel ideas, and translate research into real-world applications. I encourage each one of you to pursue your passion for inquiry with diligence and integrity, as your efforts today will shape the future of science and innovation.

On this special occasion, let us celebrate our achievements, embrace challenges, and reaffirm our commitment to research excellence. I wish all participants great success and look forward to witnessing groundbreaking discoveries that will emerge from our institution.
Best wishes

Message Form

Chief Operating Officer SVGI



Dr. B. VIDHVA

As we gather to celebrate and honour the spirit of discovery and innovation, I want to extend my heartfelt gratitude to each of you for your dedication and commitment to advancing knowledge. Research is the cornerstone of progress of any HEI, and your tireless efforts today will shape the solutions of tomorrow.

This Research Day serves as a testament to the power of collaboration, curiosity, and creativity in driving meaningful change. I am proud to work alongside such talented individuals who continue to push boundaries and redefine what's possible.

Let us continue to inspire one another.
Thank you for your passion and hard work.

Message From Director, SVMCH&RC



Dr. S. Ratnasamy, B.Sc. M.S.,

I am immensely pleased to witness that Sri Venkateshwaraa Group of Institutions (SVGI) is bringing out the SOUVENIR on the scientific titles presented during the Research Day held on 28th March 2025 with an aim to create research awareness and research involvement among the teaching and student population of our Institutions.

This event has been planned to create an interest and involvement in research among the academic stakeholders and also has sown the seeds for collaborative research among various colleges in SVGI.

This aims to contribute to the improvement of mankind in health and scientific spectrums and to create a healthier society. I am sure that this SOUVENIR would be a perfect platform to showcase the discussions held in various scientific perspectives during the occasion.

Because of the sufficient knowledge, adequate technical and soft skills and uninterrupted continuous efforts by the students 'community, this SOUVENIR has been released in a elegant manner.

I would like to compliment the entire organising team for this wonderful endeavour in bringing together the various scientific streams and wish them all a grand success.

Message From Dean Research & PG Academics



Dr. Paapa Dasari

I am honoured to have given the role of organising chairperson for the Research Day 2025. Research Day is testament to our commitment to fostering a culture of innovation and advancement of knowledge . Currently technology and digital health Research have taken over the clinical research in all fields. Research needs to be supported in all aspects by all students, Residents faculty and administrators so that new innovations help mankind to lead a healthy and quality life. I am confident that SVMCHRC in collaboration with all other Institutes in the Campus (SVCET,SVCPMS, SVCOPT, ICON, SVDC, SVCP) will work to achieve the dreams and goals of our Chairman and management. The scientific deliberations on the "Research Day " will encourage the students and faculty to undertake the Quality Research at SVGI.I wish ground breaking discoveries would emerge in the future at SVGI.

Message From **Vice Principal Admin**



It is with great pleasure that I extend my warmest greetings to all the participants, speakers, administrators and organizing team of the Research Day 2025.

Research is creating new knowledge. Occasions like Research Day serves as a wonderful platform for educationists, diagnostic consultants and researchers to share their experiences and findings which would be of great help for many other participants to gather, improvise and put into practice the novel and innovative ideas. It was a very welcoming gesture to know the involvement and participation of UG students, PG students and faculties in the scientific presentations.

I am confident that the insights shared within these pages will inspire future generations of researchers and contribute to the continued progress of our field.

I extend my gratitude to the organizers for their dedication and vision in orchestrating this remarkable event. Their dedicated and tireless efforts in the meticulous planning and the conduct of all the events has made this day a reality

Wishing you all a fruitful and enriching experience on this Research Day-2025

Message From **Vice Principal Academic**



Dr. K. Tamilselvan, MD, PhD

On behalf of the Academic wing of Sri Venkateshwaraa Medical College Hospital and Research Centre , Ariyur , Puducherry, I would like to express my sincere thanks to our Dean Research, Dr Papa Dasari madam and extend my warm appreciation to the organising team for all the meticulous efforts made to organise this third Research Day , a great academic event involving all the colleges of Sri Venkateshwaraa Group of Institutions .

Message From Chief Guest



Prof G Kumaramanickavel, MD

On the research day, I wish the very best for the Sri Venkateswara Group of Institutions. The activities and the standing of SVGI are highly commendable. Its contribution over the years, playing a key role in higher education, is remarkable. Congratulations to the entire team of SVGI.

Medicine and science have advanced to an extent that we could not have imagined a quarter century ago. Basic sciences, genomics, clinical medicine, and artificial intelligence collectively will take our human race to new horizons that we have never visited before.

India is becoming a critical country in the areas of STEM (science, technology, engineering, and medicine). Educating, training, and orienting our younger generation is vitally important for educational institutions like SVGI.

I wish once again the best in future to SVGI management, faculty, and students.

Message From Vice - President - Health



Prof Sudhesh Kumar

Many congratulations

Dear Prof Dasari

I'm delighted to see the excellent research at Srivenkateshwaraa hospitals showcased on your Research Day. It is a great opportunity for early career researchers to stimulate and inspire them. Many congratulations

Prof Sudhesh Kumar
Vice-President-Health
University of Warwick
United kingdom

Message From
Medical Superintendent



Dr. G. JOSEPHRAJ

I am happy to observe and note that the Research activities at SVGI are reaching the standards of National Level. The Students and Faculty are coming forward to undertake research with clinical and Laboratory material available to them. SVGI also involving Researchers from other Institutions to carryout their Projects in the Central Research Lab. I wish the organizing team "Best Wishes" to conduct the event successfully

Message From

Medical Director, Care Fertility Leeds, United Kingdom



Dr. Mariano Mascarenhas

SVGI promotes curiosity and a research spirit for their faculty and students and this research day is further evidence of their institutional backing in this important endeavor. Dr. Mariano Mascarenhas, Medical director, Care Fertility Leeds



Guest Talks



CHIEF GUEST

Dr. G. Kumaramanickavel, MD

*Director of Research,
Narayana Nethralaya, Bangalore, India*

BRIEF CV

- ▶ Prof Govindasamy Kumaramanickavel, MD

CAREER INTERESTS:

- ▶ Ophthalmic genetics, medical genetics, genetic counselling.
- ▶ Currently: Research Director at Narayana Nethralaya, Bangalore, India.

FORMERLY:

- ▶ Research Fellow, University of Otago, New Zealand.
- ▶ Fogarty Visiting Associate, National Eye Institute, National Institute of Health, USA.
- ▶ Executive Officer (Medical), Deputy Research Director, Sankara Nethralaya, India.

GENETIC COUNSELING:

- ▶ Has performed genetic counselling for over 15,000 patients/families.
- ▶ Education, Training and Research:
Graduated in Medicine - MBBS, MD (Physiology), University of Madras, Madras Medical College, India
Visiting Professors at several universities in India and abroad.
- ▶ Grants: DBT, DST, ICMR, CSIR (Government of India); NIH (USA); INSERM (France) & Private Agencies.
- ▶ Publications: Over 135 peer-reviewed publications including Nature Genetics.
- ▶ Google Scholar citation index (citations: All/since 2020 - 7157/2037, h-index - 44/24, i10-index - 94/49).
Recognized PhD guide for various universities in India and abroad. Guided over two dozen students.

SUMMARY OF INAUGURAL SCIENTIFIC TALK

Dr. G. Kumaramanickavel, MD

Director of Research,
Narayana Nethralaya, Bangalore, India

TITLE: Personalized Medicine And Its
Application In Clinical Practice

- ▶ Today, we are transitioning from a universal approach to personalized or precision medicine.
- ▶ The individual variation in our genome makes us unique, and hence medical management should also be specific for an individual and hence personal.
- ▶ From clinical diagnosis to modern pharmacological prescription, the field is rapidly evolving and becoming more personalized. Our genomic makeup will determine some of the therapies we use. These include peptide therapy, cell therapy (stem cell therapy), gene or DNA-dependent therapy, gene non-dependent therapy (agnostic therapy), RNA-dependent therapy (siRNA, miRNA therapies), DNA editing (genome editing), RNA editing, small molecule therapy, Oligonucleotide therapy, and exosome therapy.
- ▶ Genetic counseling for matrimonial or prenatal diagnosis purposes is rapidly gaining popularity due to the rapid methods of next-generation DNA sequencing, which offer quick turnaround times, accurate results, and affordability. Artificial intelligence and bioinformatics are adding to the complexity and interests of the health industry.
- ▶ It will not be surprising to see that our physicians will need the assistance of computers to prescribe personalized prescriptions for the precise betterment of our patients.



Scientific Talk -1
Dr. Reena Gulati



GUEST OF HONOR

Prof. Reena Gulati, MD., DM.,

*Professor, Department of Paediatrics,
Incharge of Genetic Services JIPMER,
Puducherry*

Professor Reena Gulati has obtained her MD in Paediatrics in PGI, Chandigarh and done her superspecialisation DM in Medical Genetics from SGPGI, Lucknow. She has established new Clinical molecular genetics laboratory in Dept. of Pediatrics, JIPMER, with funds generated from DBT where she is working as Professor. She is the Principal coordinator of 'Postgraduate Diploma in Genetic Counselling' supported by Govt. of India through DBT, India. Funds generated - Rs. 1 crore

She has 2 International and 3 National Grant amounting to 4 Crores. Has 5 faculty funded Projects from ICMR and one from DBT. She has guided 14 Postgraduate thesis Projects, 3 DM thesis projects and 2 PhD Projects

She has 46 Publications and 5 book chapters and one IAP (Indian Association of Paediatrics) patient information booklet to her credit

She is member of various National associations

1. National DBT Task force member- Human Genetics and Genomics from 2017-19.
2. Member, Technical expert committee for selection of Genetics Research projects, DBT.
3. Inspector for Clinical trials, CDSCO, Deputy Drugs Controller (South Zone), DGHS, Ministry of Health & family welfare, Govt. of India.
4. Member, National expert committee for development of National occupational standards/Qualification pack (NOS/QPs) for new courses in Genetic Counselling.
5. Member, Institute Ethics committee, MGMC&RI, Pondicherry- 3 year period
6. Member, Institute Ethics committee (Human), Pondicherry University, Pondicherry
7. Member, Institute Scientific Advisory Committee (Human), AIIMS Bilaspur (HP)
8. Member, Women cell, Pondicherry University.
9. Member, faculty recruitment committees for multiple national institutes including new AIIMS and ANIIMS.
10. Consultant expert member for 'Committee for selection of Genetics Research projects- CM fund' TNMGR Medical University.

Participated in many National Conferences as Speaker and Chair person.

Summary of Scientific Talk -1

Prof. Reena Gulati, MD., DM.,

*Professor, Department of Paediatrics,
Incharge of Genetic Services JIPMER, Puducherry*

Application of Next Generation Sequencing (NGS) in clinical settings

- ▶ Among the technological advances in human disease management, NGS has revolutionized clinical diagnostics and personalized medicine. Though the tests are usually considered to be useful for genetic and rare diseases, it has far-reaching applications in different aspects of medicine. After it became available for application in the clinical settings, the management of diseases has undergone a sea change.
- ▶ Besides revolutionising the diagnosis of rare and inherited diseases, that are definitely not rare in India with its huge population and prevalence of consanguinity in many parts of the country, it has application in rapid diagnosis of diseases dealt with in intensive care, diagnosis of multiple types of cancers, prenatal diagnosis, suitability of specific drugs for individuals (personalised medicine), development of newer drugs etc.
- ▶ It has also revolutionised management of infectious diseases by helping in identifying the genomes of infectious agents. HLA typing for transplants is another area that has made such transplants possible for humans.



Scientific Talk - 2
Dr. Sathish Kumar



GUEST OF HONOR

Dr. Sathishkumar Ranganathan

*Solid state and Structural Chemistry Unit
Indian Institute of Science, Bangalore India - 560012*

BRIEF CV

- ▶ Dr. Sathishkumar Ranganathan, BSc., MSc., MTech, PhD has a professional experience of 25 years. His Research work is mainly revolves around Pharmaceutical Co-crystals and salts, s . In-situ Cryo-Crystallography, Mitigation of Carbon dioxide, Synthesis of Bio-active molecules. He authored 23 publications and has h-index Of 9 9; i10-index of 9 and 380 citations.
- ▶ He has participated in many National and International Conferences and presented papers and the recent ones include paper presentation in the Gordon Research Conference (GRC) on crystal engineering titled as "Advancing the design of Crystal" which was held in Newry, Maine, United States of America, from 23rd June 2024 to 28th June 2024 ; a paper at the XXVI Congress and General Assembly of the International Union of Crystallography meeting (IUCr-2023) which was held in Melbourne, Australia during 22nd August 2023 to 29th August 2023
- ▶ He is also an invited speaker in many scientific organisations . His Research has fetched him best poster presentation award in Bragg Centinneal Symposiums, held atAdelaide, South Australia, Australia during 02nd December 2012 to 06th December 2012 . He also won best poster presentation award in the Twenty-Fourth Congress and General Assembly of the International Union of Crystallography was held in Hyderabad International Convention Centre Hyderabad, India during 21st August 2017 to 28th August 2017 . His PhD thesis was awarded Vasudevamurthy-Soundararajan" prize

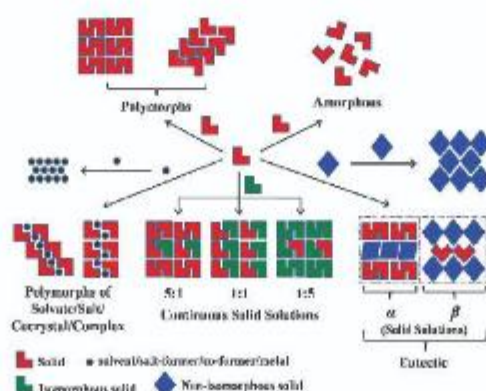
Summary of Scientific Talk -1

Dr. Sathishkumar Ranganathan

Solid state and Structural Chemistry Unit
Indian Institute of Science, Bangalore India - 560012

Design of New Pharmaceutical Crystalline Solids: Polymorphs, Molecular Co-crystals and Salts

The selection and nomination of the solid forms of an Active Pharmaceutical Ingredient (API) including its free form, salts, co-crystals, polymorphs, hydrates and solvates are plays a crucial in the development of advanced pharmaceutical solids. In this talk, I will be discussing about the importance of the crystallinity with respect to the pharmacokinetics of the API, in this regard few case studies about the polymorph of ritonavir and some commercially available antiviral co-crystal drugs will be presented. Next, I'll discuss the findings of my research work on salts and co-crystals of Trimethoprim (TMP), [(2,4-Diamino-5-(3,4,5-trimethoxybenzyl)pyrimidine)] and Sulfamethazine (SFZ), [(4-amino-N-(4,6-dimethylpyrimidin-2-yl) benzenesulfonamide)] with heterocyclic co-formers viz., thiazole carboxylic acid (TCA), pyridine dicarboxylic acid (PDA) and nicotinic acid (NA). The following one, I will cover the biologically significant compound cytosine salts containing gallic acid (GAL), salicylic acid (SAL) and thiazole carboxylic acid. The topic of quinidine deals about the function of solvent in the solid form at the conclusion. In all the cases, a thorough analyses of hydrogen bonding pattern will be discussed.





Research Day
2025
Presentations

LIST OF FACULTY ORAL PRESENTATION

Venue: Hippocrates Hall, 24.4.2025

S. NO	Name & Department	Title
1	Dr . Sri Sai Priya Dept of Psychiatry	Assessment of needs in Transgender individuals with psychiatric morbidity- A cross-sectional study
2	Sharmi Bascarane Dept of Psychiatry	Gestational exposure to benzodiazepines or z-hypnotics and neurodevelopmental disorders in offspring: Systematic review and meta-analysis
3	Dr. Kavya Dept of Psychiatry	Ever wondered why we succumb to the faintest of the inconveniences in life?
4	Dr. Muthukrishnan, Faculty, Anatomy	Variation in Muscle Fibers connected to Flexor Carpi Radialis Longus from Bicipital Aponeurosis Pronator teres and Flexor digitorum Superficialis - A Case Report

PG ORAL PRESENTATIONS

Venue: Hippocrates Hall, 24.4.2025

S. NO	Name & Department	Title
1	Bharathivelan. A Anatomy	A Morphological and Morphometric study of jugular foramen in dry skulls and 3rd reconstructed computerised tomographic images of skulls in puducherry- a cross-sectional study
2	Madhumitha Obstetrics & Gynaecology	Efficacy of injection Ferric carboxymaltose versus injection Iron sucrose for treatment of anaemia in postnatal women
3	Ganesh Kumar Community Medicine	Prevalence of Out of Pocket Expenditure among Urban Households of Puducherry.
4	Dr. Suryanarayanarjan K Psychiatry	Assessment of needs in Transgender individuals with psychiatric morbidity- A cross-sectional study
5	Rakesh Madhivanan Ophthalmology	Guidance of Sight: Empowering Diabetics With Glaucomaawareness
6	Anbarasi Pathology	A study of comparison between conventional fluid cytology and manual liquid based cytology in a tertiary care hospital, puducherry
7	Prassanna R Radiodiagnosis	Measurement of acromiohumeral distance in patients with normal supraspinatus in magnetic resonance imaging

Original Article

EVER WONDERED WHY WE SUCCUMB TO THE FAINTEST OF THE INCONVENIENCES IN LIFE?

Dr. Kavya, Asistant Professor, Department of Psychiatry, SVMCHRC

BACKGROUND:

“Resilience” is a term just like any other word in English – a derivative of latin “resilire” meaning “to rebound”. Its literal translation to tamil is மீள்வதன்மூலம் which means the ability to overcome an obstacle in life and regain full functioning capacity that purports to survival. We can apply this to each of our lives where we feel like giving up when faced with a problem. For example, when our boss expresses contempt towards us, many a time we feel like quitting and getting a better job with a possibly better pay elsewhere despite being well educated and qualified and coming from relatively stable socio-economic and cultural backgrounds. In order to study this phenomena I chose to research on the mind-states and cognitions of the wives of men with alcohol dependance syndrome, the magical subpopulation of people whom I consider to be the most resilient in the whole wide world.

These “wives” – are not educated with fancy degrees to their names nor were they built for resilience. They were married off at a tender age of 16-19 years because their parents could not afford to find a better guy and being a “girl” meant “dowry and a burden”. All their life stories have a typical honeymoon phase in the beginning of the marriage where the men woo them with their wit and the narcissistic charm, then their deep hidden subtle alcoholic patterns emerge soon to be blatant enough to wreck the marriage. At this stage, the wife is left with an alcohol dependant husband who has pledged all their wealth to drink, 3 kids (usually 2 girl children and 1 boy child, with the boy being the last of the litter). Now this wife transforms just like an undercover commissioner who reveals her identity, runs 2 jobs, strives to pay off the debt, makes sure they have food on the plate, a roof over their heads and sends all 3 of their kids to school.

OBJECTIVES:

To understand “why?” and “how?”

METHODOLOGY:

Wives of all ADS patients attending the opd were asked –

Why did you chose to stay in this marriage when you had the chance to abandon him and build a new How did you? Screening for major mental illness including stress. Sample size: 100

RESULTS:

None of the wives had a mental health condition.

97% of the replies had the following concepts in common.

Having no other option. Acceptance of the ultimate fate.

CONCLUSION:

Their inability to see any other options stems from their inability to gain financial independence and social security.

IMPLICATION:

As physicians we are all indebted to educate our patients to educate their girl children. Marriage can wait. We all think we have many options and this leads to resentment of our current life and a constant state of unrest. Sometimes having too many options is a curse, isn't it?!

Original Article

ASSESSMENT OF NEEDS IN TRANSGENDER INDIVIDUALS WITH PSYCHIATRIC MORBIDITY - A CROSS-SECTIONAL STUDY

Dr. Sri sai Priya, Department of Psychiatry, SVMCHRC

BACKGROUND:

The prevalence of psychiatric disorders in TGs is higher than in cisgender individuals(1,2) and compounds the disadvantages faced by this marginalized community. The concept of Needs aids in comprehending the discrepancy between the demands of the service user and the provider(3). The study's primary objective was to assess the needs of Transgender individuals with psychiatric morbidity and secondary objective to estimate the prevalence of psychiatric morbidity in Transgender individuals.

METHODOLOGY:

This was a cross-sectional study using convenience sampling from October 2023 to May 2024 in Puducherry through Sahodaran Community Oriented Health Development (SCOHD) Society, a community-based organization (CBO) for the Gender diverse individuals over 9 months from October 2023 to May 2024. Sample size calculated using an anticipated prevalence of Psychiatric co-morbidity in Transgender individuals as 76.6%(4) with 8% absolute precision and a 5% significance level (Z2PQ/d2). The estimated minimum sample size was 110. 128 Transgender individuals fulfilling the criteria for Gender Dysphoria (GD) as per DSM-5 were interviewed and those with psychiatric morbidity as per DSM-5 apart from GD were administered a Semi-structured proforma and Camberwell Assessment of Needs Short Appraisal Schedule. Data was analyzed using Epi Info 7. Descriptive analysis employed mean, standard deviation with a range for continuous variables, and frequency distributions for categorical variables.

RESULTS:

The prevalence of any DSM-5 mental disorder was 72% (n=92) in this sample with 87% of them never having had a psychiatric consultation. Major depressive disorder (n= 51, 40%) was the most common diagnosis. The mean number of needs on CAN was 6.14. Only 8.5% of these needs were met and 91.5% of needs remained unmet. The most reported Unmet Needs were money (79.3%), welfare benefits (69.5%), basic education (40.1%), psychological distress (44.5%), intimate relationships (37%), accommodation (34%), transportation (32%) and information on condition and treatment (29.3%)

CONCLUSION:

Most of the needs expressed by TGs are unmet, and psychiatric morbidity is high.

IMPLICATION:

A comprehensive public health program ensuring access to education, employment, housing, and welfare benefits, in addition to timely and appropriate interventions for the highly prevalent mental health issues, is important for meaningful benefit to this minority community. In a resource-poor country like ours, improving the mental health literacy is important.

Original Article

“GESTATIONAL EXPOSURE TO BENZODIAZEPINES OR Z-HYPNOTICS AND NEURODEVELOPMENTAL DISORDERS IN OFFSPRING: SYSTEMATIC REVIEW AND META-ANALYSIS”

Chittaranjan Andrade, Natarajan Varadharajan, Sharmi Bascarane, Vikas Menon

INTRODUCTION:

Benzodiazepine (BDZP) and/or z-hypnotic dispensing during pregnancy has increased globally, as have rates of autism spectrum disorder (ASD) and attention-deficit hyperactivity disorder (ADHD). This systematic review and meta-analysis aimed to estimate the association between gestational exposure to BDZP and/or z-hypnotics and diagnosis of ASD or ADHD in offspring.

METHODS:

We searched MEDLINE, EMBASE, and SCOPUS from inception till December 2023 for relevant English-language articles. Outcomes of interest were risk of ASD and ADHD, two independent primary outcomes, in children exposed anytime during pregnancy to BDZP and/or z-hypnotics versus those unexposed. Secondary outcomes were trimester-wise analyses. Using a random effects model, we pooled the overall and trimester-wise hazard ratios (HRs), with 95% confidence intervals (CIs), separately for risk of ASD and ADHD.

RESULTS:

We found six eligible retrospective cohort studies and no case-control studies. There was no increased risk of ASD associated with anytime gestational BDZP and/or z-hypnotic exposure (primary outcome, HR, 1.10; 95% CI, 0.81–1.50; 4 studies; n = 3,783,417; 80,270 exposed, 3,703,147 unexposed) nor after first trimester exposure (HR, 1.15; 95% CI, 0.83–1.58; 3 studies; n = 1,539,335; 70,737 exposed, 1,468,598 unexposed) or later trimester exposures. A very small but significantly increased risk of ADHD was noted with anytime gestational exposure to these drugs (primary outcome, HR, 1.07; 95% CI, 1.03–1.12; 4 studies; n = 2,000,777; 78,912 exposed, 1,921,865 unexposed) and also with (only) second trimester exposure (HR, 1.07; 95% CI, 1.03–1.12; 3 studies; n = 1,539,281; 33,355 exposed, 1,505,926 unexposed). Findings were consistent in sensitivity analyses.

CONCLUSION:

Gestational exposure to benzodiazepines or z-hypnotics was not associated with an increased risk of ASD and with only a marginally increased risk of ADHD in offspring. Given the likelihood of confounding by indication and by unmeasured variables in the original studies, our findings should reassure women who need these medications for severe anxiety or insomnia during pregnancy.

Case Report

“VARIATION IN MUSCLE FIBERS CONNECTED TO FLEXOR CARPI RADIALIS LONGUS FROM BICIPITAL APONEUROSIS PRONATOR TERES AND FLEXOR DIGITORUM SUPERFICIALIS” - A CASE REPORT

Dr. Muthukrishnan, Assistant Professor, Department of Anatomy, SVMCHRC,

INTRODUCTION:

The bicipital aponeurosis, also known as the lacertus fibrosus, is a fibrous structure that arises from the tendon of the biceps brachii muscle and extends medially across the forearm. It plays a crucial role in protecting underlying neurovascular structures and assisting in forearm movements. Variation in the anatomy of the bicipital aponeurosis and its connections to surrounding muscles can have clinical implications, particularly in surgical settings and in understanding certain neuropathies. Similarly fibers arising from pronator teres to flexor carpi radialis have effects on movements of forearm and wrist. A short slip of fibers arise from flexor digitorum superficialis to connect with flexor carpi radialis longus denotes the functional contribution to flexor carpi radialis longus. Case: A approximately 65-year-old male cadaver exhibited muscle fibers that originated from the bicipital aponeurosis, pronator teres and flexor digitorum superficialis merging with the flexor carpi radialis. The variation suggest a complex relationship between the bicipital aponeurosis, pronator teres and flexor digitorum superficialis and the flexor carpi radialis, which may influence the function and clinical presentation of the forearm muscles.

Embryological Aspects:

Embryologically, the development of muscle fibers and their connections can be attributed to the migration and fusion of somites during the fourth week of gestation. Variation may arise from disruptions in this process, leading to additional muscle slips or atypical attachments. The presence of extra muscle fibers may indicate an abnormality in the patterning of muscle development, which could be linked to genetic or environmental factors during embryogenesis.

CLINICAL IMPLICATIONS

The clinical significance of these variation is multifaceted:

Surgical Considerations: Knowledge of such anatomical variation is crucial for surgeons performing procedures in the elbow and forearm regions. Awareness of additional muscle slips can prevent inadvertent damage to neurovascular structures during surgeries. **Functional Impact:** The presence of additional muscle fibers may alter the mechanics of forearm movements, potentially affecting strength and range of motion.

CONCLUSION:

The variation in muscle fibers connecting the bicipital aponeurosis, fibers contribution from pronator teres and fibers from flexor digitorum superficialis to the flexor carpi radialis longus underscore the complexity of human anatomy. Understanding these variations enhances our knowledge of anatomical relationships and their clinical relevance, particularly in surgical and diagnostic contexts. Further studies are warranted to explore the prevalence and implications of such variations in diverse populations.

Original Article

A STUDY OF COMPARISON BETWEEN CONVENTIONAL FLUID CYTOLOGY AND MANUAL LIQUID BASED CYTOLOGY IN A TERTIARY CARE HOSPITAL,PUDUCHERRY

Anbarasi. Kalaivani@selvi ., Jonathan Arnold, Department of Pathology, Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

INTRODUCTION:

Most comparative studies between Conventional Smear (CS) and Liquid-Based Cytology (LBC) have focused on gynecological specimens, with limited research on body fluids. Additionally, automated LBC methods often require costly processing systems, which may be unaffordable in low-resource settings. With this background, we conducted this study to evaluate the manual liquid-based cytology (MLBC) using Eziprep Non-Gyn/Cytology Processing Kit, and compare its effectiveness with CS preparations on body fluids.

METHODOLOGY:

We assessed fluid samples obtained from clinical wards and received at our laboratory, totalling 97 samples that met the inclusion criteria. Smears were prepared from all 97 samples using both conventional techniques and the MLBC method. This Comparative analysis includes 5 parameters such as cell distribution, cellularity/cell yield, cellular overlapping, cytomorphology, and background. The interpretation was performed by faculties who were not involved in the study during routine cytology reporting to prevent biased results and was reviewed by the investigators for final opinion.

RESULTS:

The manual Liquid-Based Cytology (LBC) method showed statistically significant differences in four parameters, except cytomorphology. The significant findings included cell distribution ($p < 0.000$), cell yield/cellularity ($p < 0.001$), cellular overlapping ($p < 0.000$), and a cleaner background ($p < 0.001$). No statistically significant difference was observed in cytomorphology (p -value=0.649). Conventional method is more sensitive (93.33%) with lower specificity of 97.56%, and has a higher NPV of 98.77% compared to MLBC, while the manual LBC method excels in specificity of 98.77%, with low sensitivity value of 87.50% and has a higher PPV of 93.33%.

CONCLUSION:

In our study, it is evident that Manual Liquid-Based Cytology (MLBC) is superior in terms of clear background, uniform cell distribution, better cellularity with minimal overlapping. However, in view of cytomorphology features, it is not superior compared to conventional smears (CS) which plays crucial role in diagnosis especially in suspicious cases. Despite this, MLBC remains a cost-effective strategy in resource-limited settings. Despite its advantages such as reduced monolayer smear, less screen time, improved cell distribution, increased cellularity, minimized overlapping, and clearer background, MLBC does not necessarily outperform conventional cytology in aiding the diagnosis. Consequently, conventional cytology remains the standard procedure. However, LBC could serve as an adjunctive method, complementing conventional cytology in certain scenarios. Adequate training of personnel in sample collection, manual preparation, screening, and interpretation yields superior outcomes.

Original Article

A comparative study of efficacy of letrozole versus clomiphene citrate in ovulation induction in patients with polycystic ovarian syndrome

Athira pradeep., Jaget Nirmala, Sindhuja Sekar Department of Obstetrics and Gynecology, Sri Venkateswaraa Medical College Hospital and Research Centre, Ariyur,

BACKGROUND:

Infertility affects approximately 10-15% of couples . The prevalence of Polycystic ovarian syndrome (PCOS) in India is found to be 5 to 10 %. PCOS is an endocrine disorder characterised by oligo-anovulation, hyperandrogenism and polycystic ovaries , often associated with infertility due to anovulation .This study was conducted to evaluate the efficacy of letrozole (LTZ) as an ovulation inducing agent and to compare it with clomiphene citrate (CC) in infertile women with PCOS.

METHODOLOGY:

This is a comparative study. This study includes 120 women referred to obstetrics & gynecology OPD of Sri Venkateshwaraa Medical college Hospital and Research centre, Puducherry, with infertility due to anovulation. The patients were divided in two groups each comprised of 60 patients. In Group-A, 60 women were given LTZ, 5mg from day 3 to day 7 of menstrual cycle. In Group-B, 60 women were given CC, 100mg from day 3 to day 7 of menstrual cycle. Follicular monitoring was done by Transvaginal ultrasonography(TVS) on days 10, 12, 14, 16 of the cycle till a mature follicle of size 18mm or more (by averaging inner two diameters of the follicle)was detected. A single injection of hCG 10,000 IU IM was given if at least one follicle was >18 mm and the endometrial thickness at least more than 8 mm was noted.

RESULTS:

Mean age, parity, and the duration of infertility were similar in both groups. Ovulation rate was 71.7% in letrozole group and 66.7% in clomiphene citrate group ($p=0.553$). onofollicular development was significantly more common in the Letrozole group (46.7%) compared to the Clomiphene Citrate group (23.3%), with a significant chi-square test ($p = 0.007$) and Multifollicular development was significantly more frequent in the Clomiphene Citrate group (53.3%) compared to the Letrozole group (20.0%), with a highly significant p -value ($p = 0.0001$). A significant difference in endometrial thickness was observed, with the Letrozole group showing a mean thickness of 9.21 ± 0.84 mm compared to 8.01 ± 0.78 mm in the Clomiphene Citrate group ($p = 0.0001$). Conclusion : In conclusion, this study highlights the superior efficacy of Letrozole compared to Clomiphene Citrate in inducing ovulation among patients with Polycystic Ovary Syndrome (PCOS). Letrozole demonstrated advantages in promoting endometrial thickness, achieving a more favourable hormonal profile, and reducing the incidence of multifollicular development. While both medications exhibited comparable rates of ovulation and pregnancy, the distinct benefits of Letrozole suggest its potential as a preferred option in fertility treatment for PCOS patients, emphasizing the importance of personalized approaches in optimizing reproductive Outcomes.

Original Article**A MORPHOLOGICAL AND MORPHOMETRIC STUDY OF JUGULAR FORAMEN IN DRY SKULLS AND 3D RECONSTRUCTED COMPUTERISED TOMOGRAPHIC IMAGES OF SKULLS IN PUDUCHERRY- A CROSS - SECTIONAL STUDY**

Bharathivelan, Department of Anatomy., Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

BACKGROUND:

The morphology of the human skull exhibits considerable individual variation. The Jugular Foramen, a complex nexus of neurovascular structures at the skull base, often becomes the focus of clinical attention due to anomalies such as jugular bulb irregularities, glomus jugulare tumors, schwannomas, metastatic lesions, and infiltrative inflammatory processes. A thorough understanding of Jugular Foramen anatomy is essential for achieving successful surgical outcomes in this technically demanding region. While various studies have conducted morphometric analyses of this foramen in dry skulls, translating these findings to computed tomographic (CT) images of human skulls is even more advantageous, as it provides insights into the relationships between critical structures in living patients. This study investigates the morphology and morphometry of the Jugular Foramen using both dry skulls and 3D reconstructed CT images, highlighting their variations.

METHODOLOGY:

This study examined 100 dry skulls (50 male and 50 female) and 200 CT images of adult human skulls (100 male and 100 female), all from individuals over 25 years old. The morphometry of the jugular foramen and its topographical relationships with bony landmarks in dry skulls were measured using a digital sliding vernier caliper. For the CT images, measurements were conducted using RadiAnt DICOM software. Data were recorded in Microsoft Excel and analyzed using SPSS version 23, with measurements taken separately for the left and right sides.

RESULTS:

The jugular foramen is predominantly alembic in shape in both dry skulls and CT images, with 94% of dry skulls and 98% of CT images on the right side, and 94% of dry skulls and 96% of CT images on the left side displaying this shape. On the right side, 69% of dry skulls and 76% of CT images lack a septum, while 12% of dry skulls and 10% of CT images have a complete septum. The remaining skulls exhibit an incomplete septum. On the left side, 75% of dry skulls and 81.5% of CT images lack a septum, with 8% of dry skulls and 7% of CT images having a complete septum, and the rest showing an incomplete septum. Oval shapes are less common, appearing in 6% of dry skulls and 4% of CT images on both sides.

CONCLUSION:

A comprehensive exploration of the morphology and morphometry of the jugular foramen in both dry skulls and 3D reconstructed computerized tomography images has been meticulously examined. This invaluable investigation provides essential insights into the diverse array of metric and non-metric parameters, shedding light on their variations. Such profound understanding serves as an indispensable resource for neurosurgeons and physicians, empowering them to strategize and execute procedures involving the intricate base of the skull with unparalleled precision and confidence.

Original Article

PREVALENCE OF OUT OF POCKET EXPENDITURE AMONG URBAN HOUSEHOLDS OF PUDUCHERRY

Ganesh kumar. Department of Community Medicine., Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

BACKGROUND:

Out-Of-Pocket Expenditure (OOPE) on healthcare is a significant concern in many parts of the world, particularly in developing countries. It represents the direct payments made by households to healthcare providers at the time-of-service use. Urban households face the dual challenge of accessing quality healthcare while managing high costs. Objective: To study the prevalence of OOPE among urban households and to find the associated factors with health expenditure.

METHODOLOGY:

A cross-sectional study was carried out among urban households of Puducherry. By using simple random sampling method (Random Generation method), the Sample size was calculated to be 347 households. A semi-structured, interviewer administered questionnaire was used to record information. Chi-square test was applied to find the association between OOPE and Insurance status.

RESULTS:

A total of 347 households participated in the study, of which 165 (47.6%) had health insurance coverage, while 182 (52.4%) were uninsured. Out-of-Pocket Expenditure (OOPE) was observed in both the groups, affecting 20 insured households (12.12%) and 49 uninsured households (26.9%). A significant association was found between OOPE and having active health insurance coverage ($p = 0.005$).

CONCLUSION:

The urban households of Puducherry, despite high resources, have incurred a conspicuous OOPE. Implementing cost-reduction strategies through policy interventions and expanding insurance coverage are essential steps towards achieving the goal of “Zero Out-Of-Pocket Expenditure” envisioned under Universal Health Coverage.

KEYWORDS:

Out-Of-Pocket Expenditure, Urban Households, Health Insurance.

Original Article

EFFICACY OF INJECTION FERRIC CARBOXYMALTOSE VERSUS INJECTION IRON SUCROSE FOR TREATMENT OF ANAEMIA IN POSTNATAL WOMEN

Madhumitha., NR. Indu., Hiremath PB., Department of obstetrics and gynaecology, Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

BACKGROUND :

Anaemia is common nutritional deficiency affecting postnatal women. Prevalence of postpartum anaemia varies from 4 to 27 %.(1)Iron deficiency anaemia is one of the important cause for postpartum anaemia .In this study we have compared injection iron sucrose with injection ferric carboxymaltose for treatment of postpartum anaemia.

METHODOLOGY:

This is a comparative study.During the study period 116 postnatal women where divided into two groups - Group A received injection ferric carboxymaltose and Group B received injection iron sucrose. Haemoglobin,red blood indices,serum ferritin and peripheral smear were taken at 3rd and 6th weeks respectively for both the groups and their results were compared.

RESULTS:

Anaemia prevalence in India is about 27 %(). In this study haemoglobin level is comparatively more elevated after anaemia correction with injection ferric carboxymaltose than with injection iron sucrose. Serum ferritin and red blood indices were also significantly raised with the use of injection ferric carboxymaltose.These results highlight that ferric carboxymaltose is more potent in replenishing iron reserves and treating anaemia.

CONCLUSION:

Effectiveness and safety of both the iron preparations were compared in this study. The results show that while both the injections raised haemoglobin and serum ferritin levels, Ferric carboxymaltose increases the iron reserves also and side effects were less during the administration of injection ferric carboxymaltose compared to injection iron sucrose.

Original Article

MEASUREMENT OF ACROMIOHUMERAL DISTANCE IN PATIENTS WITH NORMAL SUPRASPINATUS IN MAGNETIC RESONANCE IMAGING

Prasanna ., Mithun Raj., Rajarajan, Department of Radiology ., Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur,

BACKGROUND:

While AHD measurement is traditionally performed using plain radiographs, utilizing MRI offers additional advantages, such as multiplanar imaging and better soft tissue resolution. This study aims to validate the accuracy and reliability of MRI in measuring AHD, which could potentially enhance diagnostic capabilities and inform treatment decisions for patients with shoulder pathologies.

METHODOLOGY:

A total of 94 subjects with normal rotator cuff were subjected to MRI shoulder and four parameters were taken which includes distance between humeral cartilage surface and acromion in coronal plane, distance between humeral cortex surface and acromion in coronal plane, distance between humeral cartilage surface and acromion in Sagittal plane and distance between humeral cortex surface and acromion in Sagittal plane.

RESULTS:

We observed variations in AHD measurements depending on the imaging plane used in MRI, with mean AHD values of 7.71 mm (humeral cortex to acromion distance) and 7.60 mm (humeral cartilage to acromion distance) in the coronal plane, and 8.45 mm (humeral cortex to acromion distance) and 8.05 mm (humeral cartilage to acromion distance) in the sagittal plane.

CONCLUSION:

This study provides the normative AHD values in patients with intact supraspinatus and infraspinatus, providing valuable reference data for clinicians and researchers in the field of shoulder pathology assessment. The establishment of normative AHD values using MRI has significant clinical implications, particularly in the diagnosis and management of shoulder pathologies such as impingement syndrome and rotator cuff tears. Accurate AHD measurements aid in identifying pathological changes within the subacromial space and inform treatment decisions, including surgical planning.

KEYWORDS:

Acromiohumeral distance, Rotator cuff, Impingement syndrome.

Original Article

COMPARISON OF EFFICACY BETWEEN BUPIVACAINE WITH DEXMEDETOMIDINE AND LEVOBUPIVACAINE WITH DEXMEDETOMIDINE IN SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK FOR UPPER LIMB SURGERIES: A RANDOMIZED CONTROL TRIAL

Santhosh., Department of Anesthesiology., Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

BACKGROUND:

Supraclavicular brachial plexus block is the most preferred technique in upper limb surgeries. Bupivacaine is commonly used in regional techniques as it has rapid onset and longer duration of anesthesia. Levobupivacaine which is pure S-enantiomer have same pharmacological effects of Bupivacaine with lesser cardiovascular and CNS toxicity. Various adjuvants have been added to local anesthetics to improve duration of analgesia. Dexmedetomidine, an α -2 agonist added to Bupivacaine and Levobupivacaine extends the duration of block and analgesia.

OBJECTIVES:

Primary objective is to compare the efficacy between onset and duration of sensory blockade, duration of analgesia, and secondary objective is to compare the hemodynamic parameters and number of rescue analgesics required post operatively between the groups. Materials and methods: A prospective randomized study was conducted after clearance from ethical committee. 60 patients between 18-60 years of ASA I and II scheduled for upper limb surgeries under supraclavicular brachial plexus block who met the requirements of inclusion and exclusion criteria. The patients were divided into two groups- Group A received 25ml of 0.5% Bupivacaine with 50 μ g of Dexmedetomidine and Group B received 25ml of 0.5% Levobupivacaine with 50 μ g of Dexmedetomidine. The data were analyzed and tabulated using independent sample 't' test and repeated Anova.

DISCUSSION:

Onset of sensory block among group B was 7.10 ± 1.24 min and group L was 8.67 ± 1.15 min ($p < 0.001$), duration of sensory block among group L was 898.00 ± 89.42 min and group B was 643.33 ± 42.45 min ($p < 0.001$), duration of analgesia among group L was 17.70 ± 4.98 hours and group B was 15.57 ± 1.19 hours ($p = 0.029$). Hence from above observation, onset and duration of sensory block was earlier in group B and duration of analgesia was prolonged in group L which showed statistically significant. There was no statistically significant difference between both groups with respect to side effects like bradycardia, hypotension, pneumothorax, hemodynamic parameters and rescue analgesics postoperatively.

CONCLUSION:

Dexmedetomidine when used as an adjuvant to Bupivacaine and Levobupivacaine in supraclavicular brachial plexus block under ultrasound guidance showed better results in Levobupivacaine group. It provided long lasting analgesia and fewer rescue analgesics.

Original Article

PREVALENCE AND CORRELATES OF BINGE EATING DISORDER IN PATIENTS WITH TYPE 2 DIABETES MELLITUS

Suriya ranjani., Department of Psychiatry Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

BACKGROUND:

Binge eating disorder (BED) is a considerable obstacle in the efficient management of type 2 Diabetes (T2D). Hence this study was taken up to estimate the prevalence and correlates of BED in patients with T2D.

METHODOLOGY:

A total of 288 consecutive patients in age group of 18-65 years diagnosed with T2D attending medicine OPD of Sri Venkateshwara Medical College And Research Centre, Puducherry were included in the study over a period of 1 month (November 2022) after ethical clearance. Patients with history of psychiatric illness, substance use, type 1 DM, HADS score ≥ 11 were excluded. A semi-structured proforma designed for the study, EDEQ-6 and PAID-5 were administered and the data was analyzed using Epilnfo7.

RESULTS:

The mean age of study population was 47.43 ± 7.21 years, the average duration of diabetes was 10.17 ± 6.12 years and 55.21% were male. About 87% were diploma/ PG holders, 85.07% were employed, 88.54% were married, and 82.6% were from urban areas. About 89.24% were from nuclear families, 75.35% were managed only with OADs, and 13.54% required both insulin and OADs. 74.74% were treated with metformin alone. There is no significant association between medication use with BED. The prevalence of BED was 1.73%. Diabetic complication (0.04), emotional stress eating (0.03), diabetic distress (0.001), and taking junk food (0.02) showed significant association with BED.

CONCLUSION:

Though the prevalence of BED in the Indian scenario seems to be lesser than reported in western countries, early screening and specific integrated interventions seem quintessential in preventing complications and associated distress.

Original Article

"A CROSS SECTIONAL STUDY TO ESTIMATE THE PRESENCE OF PLASTICIZERS IN PLASTIC WATER BOTTLES AND ITS EFFECT ON HORMONAL DISRUPTION AT A TERTIARY CARE HOSPITAL IN PUDUCHERRY."

Mr. Arul kumaran (Final year MBBS) ICMR STS Project, Guide Dr. Sakthi balan, Prof, Department of Pharmacology, SVMCHRC

BACKGROUND:

Plasticizers such as di(2-ethylhexyl) phthalate (DEHP) and bisphenol A (BPA) are recognized endocrine-disrupting chemicals (EDCs) commonly found in plastic water bottles. Exposure to these chemicals, especially through drinking water stored in plastic containers, raises concerns about potential health risks, including hormonal disruption.

OBJECTIVES:

This study aimed to quantify the presence of DEHP and BPA in bottled water samples, assess the effects of temperature and storage duration on their leaching, and evaluate consumer awareness regarding the health impacts of plasticizers.

METHODS:

A cross-sectional study was conducted over two months at a tertiary care medical college and teaching hospital in Puducherry. Twenty-seven water samples from plastic bottles/cans of three different companies were analyzed for DEHP and BPA levels using LC-MS under varying temperature (5°C, 25°C, and 40°C) and time conditions (24 hours, 48 hours, and one week). Additionally, a survey was administered to 45 participants to assess their knowledge and practices related to plastic water bottle usage.

RESULTS:

Significant leaching of DEHP and BPA was observed at both high (40°C) and low (5°C) temperatures, particularly with prolonged storage. DEHP levels were higher compared to BPA, although both remained within internationally accepted safety limits. Survey findings revealed limited awareness (51.2%) about plasticizers, with 77.7% of participants storing bottles in refrigerators and 15.5% reporting a history of endocrine abnormalities.

CONCLUSION:

While the detected plasticizer levels were below toxic thresholds, improper storage practices, such as exposure to extreme temperatures, can enhance leaching. The findings highlight the need for increased consumer education and stricter regulatory guidelines on plastic packaging and storage conditions to minimize potential health risks.

KEYWORDS: Plasticizers, Water bottles, hormonal disruption

PG POSTER PRESENTATIONS

Venue: Hippocrates Hall, 24.4.2025

S. NO	Name & Department	Title
1	Dr.Suseendhran S General Medicine	A rare case report of Primary Sjogren Syndrome presenting as Autoimmune hemolytic anemia
2	Dr.Aravind Prasanna DVL	Segmental Darier's disease along blaschko's line - unique presentation
3	Dr. Felix Fernandus General Medicine	Uncommon Manifestations of Grave's Disease - A Case Report
4	Dr.Dinesh.I DVL	Kawasaki Disease with Coronary Involvement
5	Dr. Soorya Narayanan DVL	Intertrigo like Dermatitis secondary to Doxorubicin
6	Dr.Sowmia DVL	Cutaneous Reactions to Doceraxel: A case of two Distinct Bullous Lesions
7	Dr.S.Oviya DVL	A Clinico-epidemiological study of inflammatory facial dermatoses at a tertiary care centre in Puducherry.
8	Dr.Preethi.S Anaesthesiology	Perioperative Maestro: navigating the storm of Infective Spondylodiscitis in a failing Heart
9	Dr. Volety Venkata Sai Sumanth General Medicine	"MITE BITES THE HEART" case of Scrub Myocarditis
10	Dr.Haripriya A DVL	Unveiling Scleredema Diabeticorum: A Case Report on an Overlooked Dermal Complication of Diabetes
11	Dr. Malladi Swamy General Medicine	Straight Back Syndrome with Pulmonary Varix and Mitral Valve Prolapse - A Rare Case of Pseudo-heart disease
12	Dr. Bharathivelan. A General Medicine	Spotter Performance Observation through Technology-Computerised resource assessment for fundamental testing: Comparative study of traditional versus Digital tool in assessment of Anatomy spotters- a cross sectional study.
13	Dr. Keerthana Radiology	Unveiling the Enigma- Takayasu Arteritis in a Young hypertensive female - A Case study
14	Dr.Anupriya. L Paediatrics	A Study of Prevalence of Hypertension in pre-adolescent obese and overweight children of age 6-10 years in a Tertiary care Hospital -cross sectional study
15	Dr.Saranraj T Radiology	Sonographic evaluation of thyroid lesions based on tirads scoring system and elastography with fnac correlation
16	Dr.A.Venkata Satish Radiology	Estimation of Gestational age by using Fetal kidney length and Placental thickness.
17	Dr.Aktshaya s Radiology	An Observational study of normal variants of Pancreaticobiliary junction using Magnetic Resonance Cholangiopancreatography in South indian population
18	Dr.Kalvi kalaiyarasan Radiology	Malignant Colo-Duodenal fistula
19	Dr. Hemalatha Radiology	Congenital unilateral agenesis of ICA
20	Dr. Madhavan.G Radiology	Zinner Syndrome - A case report of rare Triad
21	Dr Madimchetty Sathya Aasheerv Radiology	Swyer-James Syndrome: as a sequelae of Congenital stridor

Original Article

AN OBSERVATIONAL STUDY OF NORMAL VARIANTS OF PANCREATICOBILIARY JUNCTION USING MAGNETIC RESONANCE CHOLANGIOPANCREATOGRAPHY IN SOUTH INDIAN POPULATION

Aktshaya, Armel Arputha Sivarajan, Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

BACKGROUND:

Magnetic Resonance Cholangiopancreatography (MRCP) is an advanced, non-invasive imaging modality that plays a crucial role in the diagnostic evaluation of pancreaticobiliary diseases. This technique leverages magnetic resonance imaging (MRI) to visualize the biliary and pancreatic ducts, providing high-contrast images essential for accurate diagnosis and treatment planning. The development of MRCP has significantly reduced the need for more invasive procedures like Endoscopic Retrograde Cholangiopancreatography (ERCP), thus minimizing patient risk while offering detailed diagnostic insights.

OBJECTIVES:

To identify and document the anatomical variations in the pancreatic and biliary ducts using Magnetic Resonance Cholangiopancreatography (MRCP). To determine the incidence of each identified anatomical variant in the study population.

MATERIALS AND METHODS:

This study examined 60 patients referred to the radiology department for MRI abdomen using 1.5 Tesla Siemens MRI machine. The variants are documented in the study department.

SRC & IEC APPROVAL NUMBER: SRC NUMBER- SVMC/SRC/2023/08/CTR 873.

IEC NUMBER- 105/SVMCH/IEC-Cert/October 23

RESULTS:

Our study's findings on the prevalence of pancreaticobiliary junction variants have several critical clinical implications. Awareness of the common variants can enhance the precision of diagnostic tools like MRCP and ERCP, leading to improved patient management through more accurate diagnosis and tailored treatment plans. The prevalence of pancreaticobiliary junction variants was as follows: pancreatic type junction in the bile duct (28.3%), pancreatic duct-bile duct junction variant (40.0%), and V type junction (31.7%).

CONCLUSION:

By documenting the prevalence and types of pancreaticobiliary junction variants, our study supports the development of tailored surgical and diagnostic approaches that consider regional and demographic differences. This tailored approach can lead to safer surgical procedures, more accurate diagnoses, and better overall patient outcomes. The detailed insights from our study contribute to the ongoing efforts to optimize diagnostic and surgical techniques, ultimately aiming to enhance patient safety and outcomes in the field of pancreaticobiliary diseases.

Original Article

"A STUDY OF PREVALENCE OF HYPERTENSION IN PRE-ADOLESCENT OBESE AND OVERWEIGHT CHILDREN OF AGE 6-10 YEARS IN A TERTIARY CARE HOSPITAL - CROSS SECTIONAL STUDY"

Anupriya .,kulandaivel.,Vijayabharathi., Department of Pediatrics, Sri Venkateshwaraa Medical College Hospital and Research Centre, Ariyur, Puducherry, India

OBJECTIVES:

To estimate the prevalence of hypertension among pre-adolescent obese and overweight children of age 6-10 years of age.

METHODOLOGY:

Research Question

Is obesity and hypertension among indian pre- adolescent children is increasing?

Study Design :Cross-sectional observational study

Study Subjects :Children of 6-10 years attending Pediatric OPD will be screened for inclusion Into the study. Children satisfying the inclusion criteria will be enrolled after taking informed consent from parents/primary caregivers and assent from the child wherever applicable.

Inclusion Criteria

Children of 6-10 years with who attend OPD

Exclusion criteria

1. <6 years and >10 years
2. Children with syndromes associated with obesity
3. Known case of nephritic syndrome
4. Refusal to give consent. Sample size: 112

RESULTS:

As a result of this study, distribution of blood pressure stages according to IAP classification is elevated blood pressure showed 16%, normotensive showed 79%, stage I hypertension 15% and there were no second stage hypertension.

CONCLUSION:

In conclusion, this study highlights the multifactorial nature of hypertension in pre-adolescent children, driven many associated factors. Regular blood pressure screenings, weight management programs, dietary education, addressing a comprehensive approach to improving cardiovascular health and resulting in reducing the prevalence of hypertension and enhancing the overall well-being of children.

Original Article

“Zinner Syndrome – A case report of rare Triad”

Madhavan., Department of Radio- Diagnosis, Sri Venkateshwaraa Medical College Hospital and Research Centre

BACKGROUND:

Zinner syndrome is a rare congenital disorder of the Wolffian duct characterized by the triad of renal agenesis, ipsilateral seminal vesicle cyst, and ipsilateral ejaculatory duct obstruction. Patients are typically diagnosed in their 3rd or 4th decade, presenting with perineal pain, recurrent prostatitis, hematospermia, painful ejaculation, or infertility.

CASE REPORT:

A 29-year-old male presented with dysuria. Ultrasound revealed an absent right kidney and enlarged right seminal vesicle. CT and MRI confirmed the absence of the right kidney, presence of a seminal vesicle cyst, and obstructed right ejaculatory duct.

DISCUSSION:

Zinner syndrome diagnosis relies on identifying the characteristic triad of imaging findings. Absence of kidney with cystic changes in the seminal vesicle are key diagnostic features.

CONCLUSION:

Zinner syndrome is rare, but recognizing its imaging features is crucial for accurate diagnosis and effective multidisciplinary management. This case highlights its clinical presentation and imaging characteristics.

Case Report

SEGMENTAL DARIER'S DISEASE ALONG BLASCHKO'S LINE - UNIQUE PRESENTATION

Aravind Prasanna, Department of DVL, Sri Venkateshwaraa Medical College Hospital and Research Centre.

INTRODUCTION:

Darier disease (DD) is an inherited acantholytic disorder with autosomal dominant inheritance, having mutation in ATP2A2 gene on chromosome 12. DD usually presents with hyperkeratotic papules subsequently coalesce to form a plaque over seborrheic areas on the trunk, intertriginous areas, face and scalp. Histologically, acantholysis and dyskeratosis characterize the disease. Herein, we report a case of 59-year-old male with Darier's disease with segmental presentation following blaschko lines.

CASE REPORT:

An otherwise normal 59-years-old gentleman came with complaints of asymptomatic raised dark lesions over right abdomen for 20 years on and off. Cutaneous examination revealed multiple, grouped, brown to hyperpigmented keratotic papules (1-2mm in diameter) with surrounding confetti-like hypopigmented macules present segmentally over right abdomen. On dermoscopy roundish yellowish/brown areas with surrounding whitish halo and pinkish homogeneous structureless area was seen. Routine examinations were normal. A punch biopsy from the lesion on histopathology revealed a hyperkeratosis, irregular acanthosis, and epidermal invaginations. The dyskeratosis was seen as a vertical tier of parakeratosis with the presence of corp ronds and corp grains. The diagnosis of segmental type 1 Darier's disease was made based on clinical and histopathological correlation.

DISCUSSION:

Darier's disease (dyskeratosis follicularis, keratosis follicularis) a rare genodermatosis with autosomal dominant inheritance occurs due to mutation in ATP2A2 gene located on chromosome 12, which encodes sarco/endoplasmic reticulum calcium ATPase isoform 2 pump (SERCA2) thereby inhibiting the transfer of Ca^{2+} from cytosol to lumen of ER leading to premature keratinization and loss of adhesion among keratinocytes.^{1,2,3} Among the types 10% belongs to segmental DD, which is of two types^{1,2,3,4,5}. Type-1 being the most common occurs due to post-zygotic somatic mutation and presents as: unilateral keratotic papules distributed along blaschko lines without nail or oral involvement and significant family history.^{2,3,5} Onset and pathology are same of generalized DD. Of note type-1 with gonadal mosaicism might produce generalized DD offspring.^{2,4,5} Type-2 occurs because of heterozygous germline mutation with postzygotic inactivating mutation and presents as generalized disease with linear streak and increased severity.^{4,5}

CONCLUSION:

We herein report this case for its peculiarity, where segmental type being the most infrequent type of "Darier's disease" and it must be added as a differential diagnosis for segmental lesions along the lines of blaschko with exacerbation on exposure to sunlight, heat, friction.

Original Article

KAWASAKI DISEASE WITH CORONARY INVOLVEMENT

Dinesh, Department of DVL, Sri Venkateshwaraa Medical College Hospital and Research Centre.

INTRODUCTION:

Kawasaki disease (KD) is a medium vessel vasculitis that most commonly affects children between 6 months to 5 years. Main symptoms include fever, conjunctivitis, skin and mucous membrane involvement, and cervical lymphadenopathy. Here, we report a case of KD with five of six features fitting into the diagnostic criteria of KD

DESCRIPTION:

A 4-year-old febrile male child presented with redness, cracked lips, and painful swelling over the right side of the neck for 5 days which did not respond to antibiotics. Mucocutaneous examination showed bilateral (B/L) nonpurulent conjunctivitis with perilimbal sparing red inflamed (strawberry) tongue with prominent papillae, erythema with fissures over both lips and right tender cervical lymphadenopathy. Echocardiography (ECHO) showed borderline dilated right coronary artery (RCA) and left main coronary artery (LMCA). The patient was started on aspirin and intravenous immunoglobulin followed by which fever reduced, and the patient's general condition improved.

DISCUSSION:

KD is a medium vessel vasculitis, commonly affects children <5 years of age. KD is classified into acute, subacute and convalescent phase. Criteria for KD include fever of at least 5 days and at least 4 of following five clinical features includes Polymorphic exanthem, B/L nonexudative conjunctival injection, Changes in lips and oral cavity, Changes in extremities (erythema or edema or desquamation), Cervical lymphadenopathy, often unilateral and large (>1.5 cm). +Patients fulfilling all these criteria will be termed as complete KD. Patients who failed to meet this diagnostic criterion will be termed as incomplete KD. KD is clinical diagnosis with laboratory features such as leukocytosis, anemia for age, platelet >450,000, raised ESR, CRP, hypoalbuminemia, elevated alanine transaminase and gamma-glutamyl transferase, and >10 white blood cells in urine with ECG and ECHO showing features of coronary artery lesions. Treatment includes primarily intravenous immunoglobulin administered within 10 days of onset of fever reduces the risk of coronary artery aneurysm formation. Then, aspirin can be started.

CONCLUSION:

KD is an important disease which should not be missed in children presenting with fever for >5 days because delay in treatment can lead to coronary artery aneurysm, and its sequelae include cardiac infarctions. Hence, early diagnosis and prompt management of KD prevent the morbidity and mortality

Case Report

“SWYER-JAMES SYNDROME: AS A SEQUELAE OF CONGENITAL STRIDOR”

Madimchetty Sathya Aasheerv., Dept. of Radiodiagnosis Sri Venkateshwaraa Medical College Hospital and Research Centre,

BACKGROUND:

Swyer-James-MacLeod syndrome, also known as unilateral hyperlucent lung syndrome, is a rare (prevalence - 0.01%) pulmonary disorder characterized by unilateral hyperlucency of the lung due to decreased vascularization and arrested alveolar development following childhood bronchiolitis obliterans.

MATERIAL AND METHODS:

Ours is a case of a 12 year old male child who came with a 5-days history of fever, vomiting, abdominal pain, and productive cough. Past history of congenital stridor, which was subsequently diagnosed as laryngomalacia, was managed conservatively. 99 Technetium gastro-oesophageal reflux scintigraphy done at 1 year of his age indicated a moderate degree of gastroesophageal reflux. Since then, the child has had frequent hospitalisations due to recurrent lung infections. On chest radiograph, unilateral (right) hyperlucent hemithorax with paucity of vessels/oligemia and mild bronchiectasis in the right lower zone. Bilateral costophrenic angles are blunt.

RESULTS:

HRCT Chest showed a decrease in right lung volume with diffuse decreased attenuation and diminished vascular markings. Collapse of right upper lobe associated with traction bronchiectasis involving the right middle and lower lobes. A thin, smooth-walled air-containing cyst is seen in the the right lower lobe. Mild to moderate right pleural effusion. The left lung appears normal. In our case, the aetiology was found to be laryngomalacia with GERD leading to recurrent pneumonitis.

CONCLUSION:

Finally, we conclude that laryngomalacia with GERD is a potential risk factor for infective bronchiolitis that may lead to SJS in older children and adults.

SPOTTER PERFORMANCE OBSERVATION THROUGH TECHNOLOGY-COMPUTERISED RESOURCE ASSESSMENT FOR FUNDAMENTAL TESTING: COMPARATIVE STUDY OF TRADITIONAL VERSUS DIGITAL TOOL IN ASSESSMENT OF ANATOMY SPOTTERS - A CROSS SECTIONAL STUDY.

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BACKGROUND:

In the dynamic realm of medical education, the methods employed for assessments have evolved significantly over time. One notable shift is the transition from traditional paper-based spotter tests to the incorporation of technology, often facilitated by PowerPoint presentations. The conventional approach of spotter tests, which involves identifying and labelling anatomical structures or medical conditions on physical images, has been a staple in medical assessments. However, digital tools have introduced a new dimension to this evaluation process.

OBJECTIVE:

To describe and characterize the features, strengths, and limitations of both PowerPoint presentations and traditional methods as tools for conducting spotter tests.-To assess and compare the quality of the learning experience facilitated by each methodology. To analyze the level of student engagement fostered by PowerPoint presentations and traditional methods during spotter tests.

METHODS:

A total of 150 first-year students have participated in this study. Each student was assessed by the two methods of examination in a sequential cross-over manner. A survey was also administered asking student's perceptions of the two different methods of assessment.

RESULT:

Accreditation Council for Graduate Medical Education (ACGME) categorizes medical competence into six related domains: medical knowledge, patient care, professionalism, communication and interpersonal skills, practice-based learning and improvement, and systems-based practice. In medical education for the 50 years there are many changes in assessment of students based on the above-mentioned category. We had changed from the traditional method of evaluation to complex methods. Medical students today are tested on knowledge, attitudes, and skills across multiple settings and methods. Feasibility and practicality play the major role in success of any assessment.

CONCLUSION:

The renewed emphasis on patient safety, quality outcomes and the social consciousness in medical education necessitates it to use high-quality, reliable, valid, educationally sound assessment methods. Traditional method has testing higher level of cognition the pure recalls as well as in clinical simulation-based question as it is easy to show or create such assessment on slides which may further improve the validity of examination. So, PowerPoint based spotter examination can be an efficient, feasible, valid and acceptable tool for conducting such examinations for a large number of students.

Original Article

PERIOPERATIVE MAESTRO: NAVIGATING THE STORM OF INFECTIVE SPONDYLODISCITIS IN A FAILING HEART

Preethi., Department of Anesthesia Sri Venkateswaraa Medical College Hospital and Research Center, Ariyur.

INTRODUCTION:

Acute heart failure with reduced ejection fraction is a sudden worsening of systolic function characterized by an ejection fraction < 40% leading to poor cardiac output and fluid overload. Perioperative management is crucial requiring careful preoperative optimization of haemodynamics, fluid balance, organ perfusion to prevent decompensation during surgical interventions.

CASE REPORT:

A 43 years old female, known case of CAD with severe LV dysfunction, diabetes mellitus with hypoproteinemia presented with bilateral lower limb paraparesis was evaluated and diagnosed as infective lumbar spondylodiscitis. She was scheduled for L2-L5 posterior stabilization with L4-L5 posterior debridement, decompression and fusion. Preoperatively patient presented with severe systolic heart failure features such as PND, orthopnoea, elevated JVP, bilateral pleural effusion and mild pericardial effusion. Preoperative optimization done by left side pleural tapping and right side ICD insertion done. Transfusion of 3 units albumin done and cardiac medications continued. Surgery was performed in prone position under general anaesthesia presenting multiple perioperative challenges. Intraoperative severe hypotension due to acute blood loss (750 ml) observed. So minimal inotropic support started with 1 unit albumin and 1 unit PRBC transfusion done. Dependent edema present and planned for 2 hours elective mechanical ventilation and then extubated uneventfully. Patient was observed postoperatively in PACU for 48 hours and then shifted to ward on 3rd day postoperative care focussed on hemodynamic stability, infection control and respiratory support ensuring smooth recovery. The patient responded well to optimization strategies and was stable.

CONCLUSION:

This case has highlighted the importance of optimizing the high risk patients prior to the surgeries for adequate intraoperative management and postoperative recovery which emphasis anaesthetologist's versatility as a perioperative physician.

Case Report

CUTANEOUS REACTIONS TO DOCETAXEL: A CASE OF TWO DISTINCT BULLOUS LESIONS

Sowmia., Department of DVL, Sri Venkateshwaraa Medical College Hospital and Research Centre Ariyur.

INTRODUCTION:

Taxanes, including docetaxel and paclitaxel, are widely used for metastatic and locally advanced cancers, as well as adjuvant therapy for node-positive breast cancer. Docetaxel, a semisynthetic paclitaxel derivative from *Taxus baccata*, can cause cutaneous side effects such as alopecia, nail shedding, stomatitis, blistering, and ulceration. Chemotherapy extravasation may lead to tissue damage, necrosis, and functional impairment, classified as vesicant, non-vesicant, or irritant reactions. We report rare case of two different types of bullae occurring in a patient on docetaxel therapy for breast carcinoma.

CASE REPORT:

A 65-year-old female with mucinous breast carcinoma on her fifth docetaxel cycle developed fluid-filled lesions on her left hand and forearm four days post-injection, with burning sensation and spontaneous rupture. Previous chemotherapy with doxorubicin and cyclophosphamide was uneventful. Examination revealed a flattened bulla with erosion and hyperpigmentation, diagnosed as bullous eruption due to extravasation, which healed with ulceration. The bulla at the time of presentation was due to the extravasation of the drug during the time of administration. Ten days later, she developed multiple tense bullae on both legs with generalized edema. Some ruptured, forming tender raw areas. A Tzanck smear was negative, while biopsy showed sclerotic collagen and dermal edema. She was diagnosed with acute hydrostatic (edema) blisters due to docetaxel-induced edema. Treatment included derroofing, systemic and topical steroids, antibiotics, and dressings. New bullae ceased as edema resolved.

DISCUSSION:

In our patient two similar but different bulla were seen, attributable to the effects of docetaxel. The bulla at the time of presentation was due to the extravasation of the drug during the time of administration. Later patient presented with a second outbreak of bullae, which were clinically distinguishable from the previous lesions by their tense non-inflammatory nature, clear fluid content, extensive presentation and association with anasarca. The above mentioned features are hallmark presentation of edema blisters. Though the development of vesicant extravasation reaction is rare with docetaxel, awareness about the entity must be present among health care professionals administering the drug. Our case is unique, as there are paucity in reports of two different bullous lesion occurring in the same patient which is attributable to the same primary cause.

Case Report

UNCOMMON MANIFESTATIONS OF GRAVE'S DISEASE – A CASE REPORT

Felix Fernandus, Suresh, Department of General Medicine, Sri Venkateshwaraa Medical College Hospital and Research Centre.

BACKGROUND:

Hyperthyroidism is one of the most common endocrine disorders, affecting nearly 42 million people in India. The usual manifestations of hyperthyroidism are neck swelling, palpitations, weight loss, heat intolerance, and menstrual irregularities. In rare instances, the disease may be asymptomatic, delaying early diagnosis and treatment. Delay in timely intervention predisposed to the development of long-term complications involving multiple organs. Hereby presenting a peculiar case of Grave's disease presenting as secondary osteoporosis, acute heart failure, and dyselectrolytemia without any common clinical signs of hyperthyroidism.

CASE :

A 55-year-old female presented to our hospital with right hip pain and difficulty in weight bearing on the right side following trivial trauma 1.5 months back. She attained menopause 3 years back. Vitals were stable and baseline investigations were normal. X-ray showed a non-united right neck of femur fracture with cortical thinning suggestive of osteoporotic fracture. Elective Bipolar hemiarthroplasty of the right hip was planned. Intraoperatively, patient developed a stable peri-prosthetic fracture of the shaft of right femur while placing the hip prosthetic. Patient was stabilized and taken for ORIF with plates and screws to fix the shaft of femur fracture the consecutive day. Postoperatively, patient started desaturating and had tachycardia associated with vomiting. On auscultation, patient had bilateral infrascapular crepitations. ECG showed sinus tachycardia with new onset T wave inversion in leads 3 and V3 – V5. Troponin I and D-dimer were negative. 2D echo showed concentric LVH with good LV systolic function. Patient was diagnosed with Postoperative heart failure with preserved ejection fraction. Hence IV fluids were withheld and started on diuretics and beta blockers following which patient improved symptomatically. Electrolyte values showed hypokalemia and hypomagnesemia for which correction was initiated. Possible differentials of secondary osteoporosis, acute heart failure, and dyselectrolytemia were considered. After ruling out other systemic causes from history, the likelihood of thyroid storm was suspected. Burch-Wartofsky point scale and Japanese Thyroid Association score were highly suggestive of thyroid storm. Thyroid profile was sent which showed low TSH and elevated free T3 and T4 levels indicative of overt hyperthyroidism.

CONCLUSION:

Thyroid disorders have an important impact on skeletal, cardiovascular, and electrolyte metabolism. This case report highlights the importance of considering hyperthyroidism as a possible differential diagnosis in patients with unexplained multisystem involvement.

Case Description

UNVEILING SCLEREDEMA DIABETICORUM: A CASE REPORT ON AN OVERLOOKED DERMAL COMPLICATION OF DIABETES

*Haripriya, Department of DVL,
Sri Venkateshwaraa Medical College Hospital and Research Centre.*

INTRODUCTION:

Scleredema diabeticorum (SD) is associated with diabetes mellitus, affecting both type 1 and type 2 patients. It is linked to prolonged hyperglycemia, obesity, and poor metabolic control. SD accounts for approximately 20% of all scleredema cases. Here, we present a case of SD in a 47-year-old female with long-standing diabetes mellitus.

CASE:

A 47-year-old female, presented at the dermatology outpatient department with complaints of painful hard swelling over nape of neck for 1 month with restriction in the range of movement of neck. She was a known case of type 2 diabetic mellitus for 10 years . She had history of recurrent wound in bilateral lower legs. Patient also complained of numbness and tingling sensation over bilateral arms on doing day to day activities. Examination findings revealed single indurated plaque over nape of neck extending to mid scapular region. Since history was suggestive of long standing uncontrolled diabetes, a routine check up of blood investigations and biopsy were planned. A 4mm punch biopsy from the swelling over nape of neck was done on the same day and sent for histopathological examination. As patient failed to come for the follow up with blood investigation reports , we couldn't proceed further .Histopathological examination revealed thickened collagen fibre separated by clear spaces in the dermis . Collagen appeared to extend into the subcutaneous fat. Superficial dermis showed mild to moderate periadnexal mononuclear cell infiltration. Ultrasonography showed increased thickness in dermis. Based on these findings, patient was diagnosed with scleredema diabeticorum.

Discussion :

Scleredema Diabeticorum (SD) is a rare and often unrecognized manifestation of diabetes, primarily affecting obese, middle-aged men with long-term, poorly controlled insulin-treated diabetes. It presents as diffuse symmetrical skin tightness over the neck, shoulders, and occasionally upper extremities, limiting range of motion. SD occurs in both type 1 and type 2 diabetes mellitus patients without racial predilection. The exact pathophysiology is unknown, but chronic poor glycemic control likely plays a central role, potentially involving nonenzymatic glycosylation processes that damage collagen fibers and increase collagen and mucin production in the dermis. Non-diabetic precipitating factors include idiopathic type and post infective type with acute onset , usually following streptococcal upper respiratory tract infection. Diagnosis is confirmed through biopsy, revealing dermal thickening and mucin deposits. There is no standard treatment protocol due to SD's rarity and refractory nature, but controlled hyperglycemia remains the first therapeutic step. Reported treatments include topical and systemic corticosteroids, PUVA therapy, electron beam therapy, methotrexate, cyclosporine, IVIg, and colchicine, along with physical therapy to improve range of motion. Despite its chronicity and uncertain treatment outcomes, SD is not life-threatening.

Case Report

CONGENITAL UNILATERAL AGENESIS OF ICA

Hemalatha, Department of Radiology ,
Sri Venkateshwaraa Medical College Hospital and Research Centre.

BACKGROUND:

Congenital unilateral agenesis of the internal carotid artery (ICA) is a rare anomaly. Due to proper sufficient collateral circulation via the Circle of Willis most cases are asymptomatic. The absence of the bony carotid canal is essential to differentiate this anomaly from chronic ICA occlusion.

CASE REPORT:

62 year old male presented with weakness of right upper and lower limb, whose CT angiography shows normal origin of arch vessels with non-visualization of right internal carotid artery from its origin (Cervical and intracranial segments). Right carotid canal is hypoplastic. Portion of supraclinoid right ICA is seen bifurcating into MCA and ACA. Right PCOM is seen from the residual ICA with hyperplastic PCOM. Right Middle cerebral artery and anterior cerebral artery are reformed probably via Anterior communicating artery. (Type A collateralization)

DISCUSSION:

The anomalies of the internal carotid artery (ICA) related to developmental defects can be categorized as agenesis (absence of both ICA and bony carotid canal); aplasia (remnant of the ICA and bony carotid canal persist); or hypoplasia (one of the ICA is small but is regular in structure, as well as carotid canal).

CONCLUSION:

The goals of imaging when suspecting ICA agenesis are confirming the diagnosis by evaluating the bony carotid canal, identifying the type of the collateral circulation, assessing the presence of associated anomalies and ruling out acute complications.

Case Report

UNVEILING THE ENIGMA- TAKAYASU ARTERITIS IN A YOUNG HYPERTENSIVE FEMALE – A CASE STUDY

Dr.Keerthana, Department of Radiology ,
Sri Venkateshwaraa Medical College Hospital and Research Centre.

INTRODUCTION:

Takayasu's arteritis (Pulseless disease) is an idiopathic inflammatory vascular disorder that most commonly involves the thoracoabdominal aorta and its branches, It may also involve the pulmonary arteries. The non-specific inflammation of involved vessels usually leads to concentric wall thickening, fibrosis and thrombus formation. Diseased arteries become stenotic or occluded, undergo vascular remodeling or develop aneurysms. Conventional angiography is considered the gold standard for the diagnosis of TA. However, multidetector CT angiography (CTA) is emerging as a reliable tool in non-invasively depicting both luminal and mural lesions in the aorta and its main branches, which may facilitate the detection of vasculitis during the early phase of TA.

CASE DISCUSSION:

A 22 year old female presented with complaints of giddiness and loss of consciousness. She is a known hypertensive for 4 years on irregular medications. On fundoscopy – Grade I hypertensive Retinopathy. Patient was sent for carotid-vertebral artery doppler, in which circumferential thickening of bilateral carotid arteries and its branches were noted with moderate stenosis of left common carotid artery and CT Angiogram was suggested. In CT angiogram, Circumferential mural thickening involving the arch of aorta, descending thoracic and abdominal aorta was noted extending to involve the origins/proximal portions of all great vessels, and along iliac arteries. The thickened wall shows post contrast enhancement suggesting active inflammation/disease – Takayasu Arteritis (Type 5 according to Numano angiographic classification)

CONCLUSION:

TA is a rare entity with poor prognosis. Aortography usually demonstrates luminal changes such as stenosis, occlusion, or aneurysmal dilatation of the aorta and pulmonary artery and their branches in late-phase Takayasu arteritis. Familiarity with the varied chest radiographic, angiographic, CT, and MR imaging features of Takayasu arteritis will permit more accurate diagnosis of this insidious disorder.

Case Report

UNVEILING THE ENIGMA- TAKAYASU ARTERITIS IN A YOUNG HYPERTENSIVE FEMALE – A CASE STUDY

Dr.Keerthana, Department of Radiology ,
Sri Venkateshwaraa Medical College Hospital and Research Centre.

INTRODUCTION:

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Original Article

"STRAIGHT BACK SYNDROME WITH PULMONARY VARIX AND MITRAL VALVE PROLAPSE - A RARE CASE OF PSEUDO-HEART DISEASE"

Malladi Swamy., Suresh., Ponnambalam., Department of General Medicine., Sri Venkateshwaraa Medical College Hospital and Research Centre.

BACKGROUND:

Pseudo-heart disease is a term used to describe various clinical conditions that mimic structural, functional, or electrical heart diseases. One such cause of Pseudo-heart disease is benign thoracic skeletal malformation. They are often misdiagnosed as heart disease as it can cause auscultatory findings on examination. They are mostly due to mechanical or structural changes secondary to compression of the large vessels in the thorax. We are hereby presenting a case of Straight Back Syndrome which is a unique cause of Pseudo-heart disease.

METHODOLOGY:

A 24-year-old female presented to our hospital with 1 episode of hemoptysis preceded by palpitations for 2 months. Patient had a similar episode 2 years back which was symptomatically treated in an outside hospital but etiology was not identified. On examination, patient is tall and thin built. Loss of normal upper thoracic kyphosis noted. Vitals were stable. Auscultation showed loud S1 with split S2 with no murmurs. Baseline investigations were normal. Chest X-ray was taken to evaluate the cause of hemoptysis, which showed a straight back (Diagnosed by De Leon et al diagnostic criteria: a/b ratio was less than 1/3). HRCT thorax showed left pulmonary venous varix with dilated pulmonary veins. CTPA ruled out pulmonary thromboembolism. 2D echo showed prolapse of the anterior mitral leaflet. Hence, she was diagnosed with Straight Back Syndrome causing Pulmonary Varices and Mitral Valve Prolapse.

CONCLUSION:

In clinical practice, patients with MVP are often misdiagnosed as senile valve disease or congenital heart disease due to the lack of primary disease diagnostic criteria. Unfortunately, research on this subject remains scarce and often dependent on isolated case reports despite being discovered 60 years ago. Since it is not commonly considered a differential diagnosis, the incidence is still unknown.

IMPLICATIONS:

This case report intends to educate the treating primary physicians about the causes of Pseudo-heart disease which can help in apt diagnosis and initiating appropriate treatment.

Case Report

"MITE BITES THE HEART" CASE OF SCRUB MYOCARDITIS

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INTRODUCTION:

Scrub typhus is a mite-borne infectious disease caused by *Orientia tsutsugamushi*, a gram-negative intracellular bacterium. Viral Myocarditis is rare complication of Scrub Typhus.

CASE REPORT:

A 65 year old female came to our institute with complaints of Fever, palpitations, breathlessness for 2 days with no other significant past history. patient was conscious, oriented O/E PR - Tachycardia with Irregular rate, ECG showed irregular RR interval and T wave inversion in V6 suggestive of Atrial fibrillation with RVR, L/E - Eschar over left shoulder. All routine baseline investigations were done which showed elevated total counts, Thrombocytopenia, 2D ECHO showed RWMA (Antero septal, inferior wall), elevated 2sets of Troponin I, As a part of fever panel work up VBD panel was sent which revealed Scrub Igm+, pt was diagnosed as a case of Scrub Myocarditis. Patient treated with Rate and Rhythm control Drugs, IV Doxycycline, IV Azithromycin, IV fluids and other conservative drugs. pt very well improved over the stay in hospital with above treatment and discharged in hemodynamically stable status.

CONCLUSION:

Myocarditis is most commonly seen in viral infections, Bacterial Myocarditis secondary to scrub typhus is a rare presentation, New onset Atrial fibrillation is also a Atypical presentation of Scrub Myocarditis. Prompt Treatment with Appropriate Antibiotics Decreases the morbidity and mortality

KEY WORDS:

Scrub Typhus, Bacterial Myocarditis, Thrombocytopenia.

ESTIMATION OF GESTATIONAL AGE BY USING FETAL KIDNEY LENGTH AND PLACENTAL THICKNESS.

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BACKGROUND:

As pregnancy progresses, the effectiveness of current methods for estimating gestational age diminishes. Meanwhile, fetal kidney length and placental thickness typically increase linearly with advancing gestational age. This observational study aims to explore whether fetal kidney length and placental thickness can serve as reliable indicators for estimating gestational age in healthy singleton pregnancies.

METHODOLOGY:

This was a prospective observational study in which 125 patients who came for regular antenatal checkup after 20 weeks of gestation has undergone antenatal ultrasound examination were included on the basis of a predefined inclusion and exclusion criteria. First gestational age estimation was done using fetal biometry (head circumference, biparietal diameter, abdominal circumference and femur length). To measure fetal kidney length, the ultrasound transducer was first oriented longitudinally along the fetal spine. A slight adjustment in angulation allowed visualization of the paravertebral plane, capturing the complete length of each fetal kidney separately. Measurements were then averaged for accuracy.

RESULTS:

In our study, the fetal kidney length and placental thickness correlated well with assigned gestational age. A positive linear relationship of gestational age with fetal kidney length and placental thickness was found. Correlation of gestational age with fetal kidney length and placental thickness was 0.966 and 0.966 respectively

CONCLUSION:

In conclusion, the study's results confirm the efficacy of using fetal kidney length (FKL) and placental thickness measurements as reliable indicators for estimating gestational age. These ultrasound measurements have proven accurate in adverse sample, enhancing the potential for widespread application in prenatal care. By enabling precise gestational age estimation, these biometric parameters can improve the timing of prenatal interventions, potentially reducing the risk of premature births and optimizing neonatal outcomes. The findings highlight the importance of integrating these measurements into routine prenatal screening protocols, suggesting that they could significantly enhance the quality and effectiveness of maternal and fetal health management. Despite challenges such as measurement variability due to operator dependency and the limitations of a cross-sectional study design, the study's impact is potentially transformative, particularly in settings where access to advanced prenatal care technologies is limited. Moving forward, further research should focus on longitudinal studies to track these measurements over time and refine the methodology to reduce variability and increase the reliability of these crucial prenatal assessments.

RESEARCH DAY CELEBRATIONS - 2025

PRIZE WINNER'S LIST

CATEGORY	ORAL PRESENTATIONS	PRIZE
FACULTY	Dr. Sri Sai Priya Associate professor Department of Psychiatry	FIRST
POSTGRADUATE	Dr. A. Bharathivelan Third year Postgraduate Department of Anatomy	FIRST
	Dr. K. Ganesh Kumar Second year Postgraduate Department of Community Medicine	SECOND
UNDERGRADUATE	Mr. R. Arulkumaran Final year MBBS	FIRST

CATEGORY	POSTER PRESENTATIONS	PRIZE
FACULTY	Dr. S. Felix Fernandus Third year Postgraduate Department of General Medicine	FIRST
	Dr. Volety Venkata Sai Sumanth Third year Postgraduate Department of General Medicine	SECOND
	Dr. Madimchetty Sathya Aasheerv Third year Postgraduate Department of Radiology	THIRD

FACULTY ABSTRACTS

S.no	Name	Type of presentation	Title
1	Dr Renuka Devi	Paper	Evaluation of peptidyl arginine deiminase -2 level in subjects with periodontitis and rheumatoid arthritis with periodontitis – a biochemical study
2	Dr Hidhaya	Paper	Sustainable orthodontic treatment: need of the hour
3	Dr Keerthana Rao	Paper	Conservative approaches to odontogenic keratocysts: a case series of three distinct treatment modalities
4	Dr Srividhya	Paper	Galectin-3 as a possible link between periodontitis and chronic kidney disease: a cross-sectional study

UG ABSTRACTS

S.no	Name	Type of presentation	Title
1	Pavithra, Nivedha	Table clinic	Enhancing dental awareness through stationery for children
2	Ganga, Gokulakrishnan	Table clinic	The game of habits
3	Arulchelvi	Table clinic	The dental booth
4	Anbumozhi, Arthi	Table clinic	Oral care jenga
5	Swarnamugi, Venkat	Table clinic	Protect your crown, protect your life

PG ABSTRACTS

S.no	Name	Type of presentation	Title
1	Dr Balaji (ortho)	Table clinic	Orthoceph positioner – to stabilize the frankfort horizontal plane for lateral cephalometry
2	Dr Jeenath (ortho)	Poster	Mind the app – enhancing patient care & practice
3	Dr Kiruthiga(ortho)	Poster	Lateral incisor bracket positioning in ugly duckling stage
4	Dr Kangaiyan(prostho)	Poster	Esthetic clasp removable partial denture – novel digital workflow
5	Dr Josepaul (ortho)	Poster	Into the world of ai – cephalometric analysis
6	Dr Durga (ortho)	Poster	Self esteem, social media and self harm
7	Dr Logesh(ortho)	Paper	Environmental impact of clear aligners - the role of orthodontists/objectives
8	Dr Rubini (pedo)	Paper	Knowledge, awareness and practice towards oil pulling as an oral hygiene aid among parents of children – a cross-sectional survey
9	Dr Hibah (prostho)	Paper	Functional and esthetic revitalization: using new frontiers in full mouth rehabilitation.
10	Dr Akansha (prostho)	Paper	Artificial intelligence in dentistry - the future of oral healthcare
11	Dr Adityanarayanan (pedo)	Paper	Internet gaming disorder
12	Dr Suvedha (pedo)	Paper	Treatment trends in pediatric dentistry – a retrospective study
13	Dr Suganya (prostho)	Paper	Biofunctional prosthetic system: a review
14	Dr Kaviya	Poster	NEXT – GEN LOCAL DRUG DELIVERY IN PERIODONTICS

TITLE**EVALUATION OF PEPTIDYL ARGININE DEIMINASE -2 LEVEL IN SUBJECTS WITH PERIODONTITIS AND RHEUMATOID ARTHRITIS WITH PERIODONTITIS - A BIOCHEMICAL STUDY**

Periodontitis is a destructive, infectious-inflammatory disease characterized by loss of gingival attachment and periodontal pocket. Release of inflammatory mediators leads to further bone destruction. Rheumatoid arthritis is characterized by the accumulation and persistence of an inflammatory infiltrate in the synovial membrane, which leads to synovitis and the destruction of the joint architecture resulting in impaired function. Both share similar pathogenesis and it is hypothesized that periodontitis may influence RA or vice versa. The aim of this study was to compare the level of Peptidyl Arginine Deiminase 2 (PAD2) in Gingival Crevicular Fluid (GCF) of subjects with Periodontitis and subjects with Rheumatoid Arthritis. A total of 80 subjects were included in the study. GCF samples were collected from Periodontally Healthy controls, subjects with Gingivitis, subjects with Periodontitis and subjects with Rheumatoid Arthritis and Periodontitis. Full-mouth clinical parameters such as PI (Plaque Index), GI (Gingival Index), PPD (Probing Pocket Depth) and CAL (Clinical Attachment Level) were also recorded. PAD2 level was determined by Enzyme-Linked Immunosorbent Assay (ELISA). The GCF of PAD2 increased steadily from Group I to Group IV and GCF levels of PAD 2 were higher in subjects with Rheumatoid Arthritis and Periodontitis in comparison to Gingivitis and Healthy subjects which was statistically significant ($P < 0.05$). Correlation of clinical parameters with CAL and PPD showed statistical significance in Group III and Group IV ($P = 0.00$). In the current study, it was concluded that, PAD 2 in Gingival Crevicular Fluid may act as strong biomarkers of Periodontitis and Rheumatoid Arthritis and could potentially be used in diagnosis and prognosis of both Periodontitis and Rheumatoid Arthritis. However, further investigations are required to elucidate the relationship between the two. In addition, longitudinal studies with larger sample size are needed to achieve decisive results and to clarify the influence of PAD 2 in Periodontitis and Rheumatoid Arthritis.

TITLE**GALECTIN-3 AS A POSSIBLE LINK BETWEEN PERIODONTITIS AND CHRONIC KIDNEY DISEASE: A CROSS-SECTIONAL STUDY**

Background: Chronic periodontitis is associated with various systemic inflammatory diseases; however, research on its association with chronic kidney disease (CKD) is relatively limited. Because both conditions share common risk factors, systemic inflammation plays a key role in the progression of these diseases. Galectin-3 (Gal-3) is a proinflammatory cytokine that plays an important role in chronic inflammatory diseases and is a potential biomarker.

Aim: This study aimed to measure salivary Gal-3 levels in patients with periodontitis and CKD to better understand their association and evaluate Gal-3 as a diagnostic biomarker for these conditions.

Materials and Methodology: Seventy-five patients were categorized into three groups: Group I, patients with CKD and periodontitis ($n=25$); Group II, patients with chronic periodontitis who were systemically healthy ($n=25$); and Group III, patients with CKD without chronic periodontitis ($n=25$). Demographic characteristics and periodontal and renal parameters were recorded for each patient. Saliva samples were collected to evaluate Gal-3 levels using an enzyme-linked immunosorbent assay.

Results: Patients with chronic periodontitis and CKD and those with chronic periodontitis alone (Groups I and II, respectively) showed significantly higher salivary Gal-3 levels than patients with CKD alone (Group III) ($p < 0.001$). Bivariate correlation analysis indicated a strong relationship between clinical parameters and Gal-3 levels across all three groups.

Conclusion: Salivary Gal-3 level is a valuable early diagnostic marker of chronic periodontitis and CKD.

TITLE

5)SUSTAINABLE ORTHODONTIC TREATMENT: NEED OF THE HOUR

BACKGROUND:

Orthodontics has come a long way since using finger pressure to move teeth to clear aligners and genetic analysis for customized treatment plans. Technology has played an irrefutable role in this. But oral healthcare practices world over carries an environmental burden, which has an even greater impact in the current scenario of threatening global warming. Health care delivery is not environmentally, socially, or financially sustainable.

Green dentistry is a high-tech approach that reduces the environmental impact of dental practices and encompasses a service model for dentistry that supports and maintains wellness. It aims for development along with conservation of natural resources to meet the needs of the future generations.

OBJECTIVE

The aim of the pilot study was to assess the awareness and practice of sustainable dental practices among orthodontists in India

METHODOLOGY:

A pilot survey was conducted among 16 orthodontists practicing in India. The questionnaire consisted of 19 questions pertaining to sustainable practices in their clinic. A google form with the questions was circulated through WhatsApp.

RESULTS

75% of the participants were aware of green dentistry but only 19% used renewable energy sources. 12.5-62.5% used disposable plastic cups, suction tips and patient drapes for patients. 37.5% still used conventional paper documentation, but only 18.8% used conventional radiographs. Digital radiographs and digital impressions were employed by about 80% of the participants. 62.5% did not recycle the orthodontic bands or brackets; and manual model analysis and cephalometric analysis were still being done by about 60%. Sterilization was done using plastic pouches by 62.5%. Teleconsultation is practiced by 18.8-43% of the orthodontists.

CONCLUSION

This pilot survey shows that though there is awareness about green dentistry among orthodontists in India, not everyone has implemented sustainable practices in their clinics.

The practical difficulty, time and cost constraints must be considered, and an appropriate plan must be formulated and implemented to increase environment friendly practices to reduce the impact on global warming.

TITLE

6) CONSERVATIVE APPROACHES TO ODONTOGENIC KERATOCYSTS: A CASE SERIES OF THREE DISTINCT TREATMENT MODALITIES

BACKGROUND:

Odontogenic keratocysts (OKCs) are aggressive jaw lesions with high recurrence potential. This case series evaluates three conservative treatment approaches: decompression, enucleation with 5-fluorouracil (5-FU), and decompression followed by endoscopic-assisted enucleation.

OBJECTIVE

The objective is to compare the short-term clinical outcomes of three conservative management techniques for OKCs over a 3-month follow-up period.

METHODOLOGY:

Three patients with histologically confirmed OKCs underwent different conservative treatments. The first patient was managed with decompression through marsupialization, resulting in gradual cyst size reduction. The second patient underwent enucleation with the adjunctive application of 5-FU to the cyst cavity to reduce epithelial proliferation. The third patient was treated using a combined approach, starting with decompression followed by minimally invasive endoscopic-assisted enucleation. Clinical and radiographic assessments were performed regularly to monitor cyst size reduction, healing, and recurrence.

RESULTS

Decompression resulted in a 65% cyst size reduction within 3 months, facilitating easier future enucleation, with no recurrence during the follow-up period. Enucleation with 5-FU led to complete healing without complications or recurrence. The combined decompression and endoscopic-assisted enucleation approach achieved complete cyst removal with minimal morbidity and no evidence of recurrence at 3 months.

CONCLUSION

Conservative management of OKCs using decompression, enucleation with 5-FU, and decompression followed by endoscopic-assisted enucleation is effective in the short term. Decompression facilitates cyst size reduction, enucleation with 5-FU may reduce the risk of recurrence, and the combined approach allows precise removal with minimal complications. Longer follow-up is necessary to evaluate long-term outcomes and recurrence rates.

KEYWORDS:

Odontogenic keratocyst, decompression, enucleation, 5-fluorouracil, endoscopic surgery, conservative management, case series.

TITLE - ORTHOCEPH POSITIONER

To stabilize the Frankfort horizontal plane for lateral cephalometry Accurate standardization of the Frankfort horizontal plane and the porion point is critical for the reliability of natural head position in lateral cephalometric analysis in orthodontics and craniofacial studies. Existing methods often rely on software-based techniques or manual estimations, which can lead to variability and inaccuracies. This innovative study model introduces a manual device designed to enhance precision and consistency in the alignment of the Frankfort horizontal plane and the identification of the porion point in lateral cephalograms. The device integrates adjustable reference markers on a stable positioning framework to ensure reproducibility across different patients and imaging sessions. It is lightweight, easy to operate, and compatible with standard cephalometric equipment. By providing a physical guide for aligning key cranial landmarks, the device minimizes errors associated with manual tracing and subjective judgment. Preliminary testing demonstrated significant improvements in standardization accuracy when compared to conventional methods. The innovation offers a promising solution for orthodontists, radiologists, and researchers, facilitating more reliable diagnostics and treatment planning. Further clinical trials are underway to validate its efficacy across diverse patient populations and imaging environments.

TITLE - MIND THE APP - ENHANCING PATIENT CARE & PRATICE

In recent years, the field of orthodontics has witnessed a rapid integration of technology into various aspects of patient care and practice management. This poster provides an overview of the landscape of orthodontic apps, examining their diverse functionalities and the benefits they offer to both patients and practitioners. These apps encompass a wide range of features, including treatment progress tracking, appointment scheduling, educational resources, virtual consultations, and communication tools such as chat and video calls. From the perspective of orthodontic practitioners, these apps enhance practice efficiency and productivity. They streamline administrative tasks, such as appointment scheduling and reminders, reducing the workload on staff and minimizing the likelihood of missed appointments. Moreover, orthodontic apps facilitate seamless communication between patients and practitioners, enabling quick responses to inquiries and concerns, thereby fostering stronger patient provider relationships. Furthermore, orthodontic apps contribute to the digitization of patient records and treatment documentation, ensuring data accuracy, accessibility, and security. This transition to digital platforms not only reduces the reliance on paper-based records but also enables practitioners to analyse treatment trends and outcomes more effectively, ultimately leading to more informed decision-making and continuous improvement in patient care. In conclusion, orthodontic apps represent a transformative innovation in the field of orthodontics, offering unprecedented opportunities to enhance patient care, improve practice efficiency, and advance the overall quality of orthodontic treatment. As technology continues to evolve, orthodontic apps are poised to play an increasingly integral role in shaping the future of orthodontic practice.

TITLE - LATERAL INCISOR BRACKET POSITIONING IN UGLY DUCKLING STAGE:

Main goal of this poster presentation is based on Broadbent phenomena when maxillary permanent canines begin to erupt at the age of 7 to 9 years. The distal divergence of incisor crown produces a midline diastema.

Parents concerned about the appearance of child seek phase I treatment with fixed appliance but improper bracket positioning during this critical stage can interfere with canine eruption or result in iatrogenic root resorption of the lateral incisor. It is based on MBT bracket positioning modified appropriately for ROTH or DAMON prescription. The slots of lateral incisor bracket (+10 torque, 8 tip) should initially be positioned parallel to the floor to avoid premature distal root tip in the path of erupting canine.

Overall, aim of lateral incisor bracket positioning in phase I is to create a passage for safe eruption of canine.

CONCLUSION:

Significance of this poster is that ugly duckling stage of tooth development is often self-correcting. Broadbent cautioned against extensive orthodontic treatment focused on anterior alignment during this period.

TITLE - ESTHETIC CLASP REMOVABLE PARTIAL DENTURE - NOVEL DIGITAL WORKFLOW

Introduction:

Cast partial dentures remain a definitive treatment option for most patients with long span edentulism and inadequate abutment support. However, an aesthetic display of metal clasp in the aesthetic zone was a concern for most patients, so here an aesthetic clasp removable partial denture was successfully planned digitally and delivered.

Case Characteristics:

A 45-year-old female patient presented with missing teeth and FPD was not an option for her so a removable cast partial denture was planned. The patient doesn't prefer conventional design because of metal clasp visibility in the aesthetic zone so an aesthetic round rest distal depression clasp was planned.

Outcome:

Patient's master cast was made after preliminary surveying, designing and mouth preparation, the master cast was scanned, and the aesthetic RPD framework was designed digitally and 3D printed in castable resin. The 3D printed framework was then casted and a removable cast partial denture made.

Discussion:

Critical considerations in CPD design include the number, type, and positioning of clasps to maintain retention and stability without compromising aesthetics. The careful planning of these factors ensures that the prosthesis blends seamlessly with the natural dentition.

Conclusion:

Through careful planning and precision in fabrication, these dentures not only restore occlusion and comfort but also achieve superior esthetics. For example, the use of a round rest distal depression clasp with its minimal metal exposure ensures an optimal, natural-looking appearance, leading to high patient satisfaction over the long term.

TITLE - INTO THE WORLD OF AI - CEPHALOMETRIC ANALYSIS

This poster is aimed at giving an outline of cephalometric analysis in orthodontics using AI. In the area of medicine and dentistry, machine learning is currently the most widely used AI application. Latest algorithms are developing rapidly, and software resources are increasing, resulting in increased efficiency, accuracy, and reliability. Current techniques for completely automatic identification of cephalometric landmarks have considerably improved efficiency and growth prospects for their regular use. The primary considerations for effective orthodontic treatment are an accurate diagnosis, exceptional treatment planning, and good prognosis estimation.

The main objective of the AI technique is to make dentists work more precise and accurate. AI is increasingly being used in the area of orthodontic treatment. It has been seen as a time-saving and reliable tool in many ways. AI is a promising tool for functioning cephalometric tracing in routine clinical practice and analysing large databases for research purposes. AI is the future of dentistry.

Conclusion

AI shows good agreement for landmark placement on both 2D and 3D images and may assist in the final manual identification or confirmation of the positions for cephalometric landmarks, making this task faster and more precise.

TITLE - SELF ESTEEM, SOCIAL MEDIA AND SELF HARM

Introduction:

self harm is a growing public health concern. This literature search aims to provide insights on relationship between self mutilation, bullying and dentofacial characteristics.

Materials and methods: A cross sectional study was carried out by to determine the prevalence of self harm among representative sample of school children and the contribution of dentofacial appearance and its correlation to bullying and self harm because of appearance. The study was conducted among eighth grade students aged 13-14 years from randomly selected schools to participate in anonymous questionnaire survey.

Results: Sample of 699 children obtained with mean age of 13.3 years years. In this study results reported were The prevalence of self harm reported was 26.9%. Subjects whom reported self harm because of dentofacial feature be 47.9%. Total Of 41 subjects reported self harm because of bullying targeted at dentofacial features.

Conclusion: self harm is a major risk factor for substance abuse and suicide.this study provides baseline data for better understanding and how orthodontic treatment can help reduce this behaviour.

TITLE - ENVIRONMENTAL IMPACT OF CLEAR ALIGNERS - THE ROLE OF ORTHODONTISTS

OBJECTIVES:

To assess the practice of clear aligner disposal and recycling among Orthodontists in Puducherry

METHODOLOGY:

A pilot survey was conducted for orthodontists practicing in Puducherry. The questionnaire consisted of 11 questions pertaining to the practice of disposing Clear aligners. A google form was circulated through WhatsApp to collect their responses.

RESULTS:

This pilot survey indicates that among the orthodontists practicing in Puducherry, a majority (58.3%) utilize multiple aligner brands or companies, while 33.3% practice with a specific brand or company. None of the aligner providers in Puducherry offer the option for disposing or recycling used aligners.

However, some orthodontists have implemented their own disposal methods, primarily through biomedical waste management services (85.7%) and aligner drop-off boxes (14.3%). Despite the lack of options provided by aligner companies, 41.7% of respondents are aware of methods for disposing used aligners. Furthermore, a majority of orthodontists (58.3%) provide instructions to their patients regarding the disposal of used aligners. These instructions primarily involve cleaning, storing, and returning aligners in a pouch to the clinic (75%), while a smaller proportion advises patients to drop them at a designated drop-off box in the clinic (25%).

CONCLUSION:

This pilot survey sheds light on the practices and awareness levels among orthodontists in Puducherry regarding the disposal of used aligners. Despite the small sample size of twelve respondents, significant findings emerged. A majority of orthodontists are utilizing multiple aligner brands, with a notable proportion unaware of proper disposal methods. However, encouragingly, a significant portion of respondents have established provisions for aligner disposal at their practices. Nevertheless, the lack of recycling options from aligner providers in Puducherry underscores the need for greater awareness and action within the orthodontic community to address this environmental concern. Moving forward, further research and collaboration are essential to

TITLE *- Knowledge, Awareness and Practice Towards Oil Pulling as an Oral Hygiene Aid Among Parents of Children - A Cross-sectional Survey*

AIM

This survey aimed to assess parents' knowledge, awareness and practice towards oil pulling as a tool for maintaining oral hygiene, as well as to raise awareness about its potential benefits.

OBJECTIVE

While modern technological advancements continue to revolutionize disease treatment, methods with minimal side effects have their roots in ancient practices. Only if parents are knowledgeable about oil pulling can they effectively teach their children to practice it.

METHODOLOGY

This survey was conducted using a pre-validated questionnaire with 14 questions focused on knowledge, awareness, and practices related to oil pulling. The survey was carried out online using Google Forms and circulated to parents of children in Puducherry. Statistical analysis was performed using SPSS software. Descriptive statistics were applied, and the results were presented as a pie chart.

RESULT

Out of 163 respondents, 66.9% were aware of oil pulling as a method for maintaining oral hygiene, while 58.3% believed it could improve gum health. Additionally, 69.3% of parents knew that oil pulling should not be practiced by children under 5 years old, and approximately 42.3% expressed a willingness to try oil pulling themselves in the future.

CONCLUSION

Limited awareness exists among parents regarding the mechanism and additional benefits of oil pulling. It is essential to raise awareness about how oil pulling can positively affect overall health and act as an affordable, safer alternative to chemical treatments, so parents can confidently educate their children about its benefits.

TITLE - *Functional and Esthetic Revitalization: using New Frontiers
In Full Mouth Rehabilitation.*

Introduction:

The loss of natural occlusion or tooth structure due to generalized attrition, loss of teeth is a significant challenge in prosthodontics, although gradual wear of the occlusal surface of teeth is a natural occurrence over a period of person's lifetime. Managing patients with significant wear often necessitates extensive restorative treatments.

Case characteristics:

A 60 year old male patient reported to the department of prosthodontics for replacement of missing teeth and difficulty chewing. On examination, patient had severe generalized attrition with loss of vertical dimension and partial edentulousness.

Outcome:

The patient was initially treated with Vertical support appliance for a month, concurrently RCT was done in attrited teeth. Following, post and core was done followed by tooth preparation and full mouth rehabilitation with porcelain fused metallic bridge restoring with increased VD of 3mm using both conventional and digital methods.

Discussion:

The prevalence of generalized attrition among older adults brings forth an array of functional, aesthetic, and occlusal health challenges that significantly impact their overall well-being. From meticulous diagnostics to tailored interventions, ongoing maintenance, and embracing technological advancements, each step contributes to the overall success of the treatment.

Conclusion:

Following the comprehensive rehabilitation using both conventional and digital methods, the patient expressed contentment with both the aesthetic outcomes and the improvement in oral health. However, it is essential to underscore the significance of regular follow-up visits and diligent dental hygiene maintenance, as they are imperative for ensuring the long-term success of the treatment.

TITLE - ARTIFICIAL INTELLIGENCE IN DENTISTRY - The future of Oral Healthcare

10) Artificial intelligence (AI) encompasses technologies analyse large datasets, enhancing decision-making and offering reliable insights. This article reviews AI's evolution, fundamentals, its applications in healthcare, particularly in dentistry. Increasing demand for accurate diagnoses and superior patient care has driven the integration of AI into dental practices. Electronic searches and consultations with organizations were conducted to explore trends in AI-based dental services. Current applications of AI in clinical dentistry are summarized, including its potential to transform patient care through advanced decision-support tools. The authors highlight the importance of interdisciplinary collaboration among clinicians, researchers, and engineers to propel AI advancements in dentistry. Despite challenges of patient privacy concerns, potential misinterpretations, AI is expected to facilitate precision treatments, real-time data sharing, and innovative research. Future developments will enable big data exchange across healthcare providers, researchers, patients, ultimately improving patient outcomes and care quality.

Keywords: artificial intelligence, future dentistry, machine learning, caries detection, innovative research.

TITLE - BIOFUNCTIONAL PROSTHETIC SYSTEM: A REVIEW

Conventional denture systems have existed in the field of dentistry since time immemorial. As dentistry has progressed, Complete Denture Prosthodontics comes with introducing the Biofunctional Prosthetic System (BPS).

BPS is called as "biogenic" or "biofunctional" system, due to its ability to construct dentures, that resemble the natural elements they substitute as well as fulfill patient aesthetics and functional demands. Dedicated impression materials, face bow transfers, articulators, teeth and denture-base materials, make BPS a popular technique in the field of complete denture prosthodontics. The biofunctional system is the innovative available approach, which prioritizes the principles of bilateral balanced articulation. The BPS system was intended to negate the shortcomings of conventional complete denture techniques. This technique presents ideal form, function, and aesthetics in complete denture prosthesis since it is based on multidisciplinary effort and a methodical approach.

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TITLE - INTERNET GAMING DISORDER

Background:

The escalating concern over smartphone addiction and Internet gaming disorder (IGD) among children underscores the urgency of comprehending its determinants and links to anxiety and behaviour, particularly for interventions targeting school-aged children.

Aim:

This study aimed to evaluate the prevalence and determinants of smartphone usage and Internet gaming disorder (IGD), including anxiety and behaviour among 6-13-year-old children.

Settings and Design: A pilot study involving 116 children aged 6-13 years from OPD, Sri Venkateshwarra Dental college was conducted. Patients were randomly sampled, and data were collected through a self-administered questionnaire.

Materials and Methods:

A self-administered questionnaire survey was conducted to evaluate the prevalence and determinants of smartphone usage and Internet gaming disorder (IGD) in children aged 6-13 years. The questionnaire comprised of 2 parts: Part A comprised Sociodemographic characteristics (6 questionnaires), Part B comprised Game-related behaviour (5 questionnaires), and Part C comprised of an anxiety measurement scale and is measured using the Generalized anxiety disorder-7 (GAD-7) scale.

Statistical Analysis Used:

Data analysis utilized SPSS v23.0, including descriptive statistics, ANOVA, Chi-square tests for intergroup comparisons, and Pearson's correlation coefficient to determine associations.

Result:

As indicated, anxiety was more prevalent in older pupils, with a greater prevalence in male students.

TITLE - TREATMENT TRENDS IN PEDIATRIC DENTISTRY - A RETROSPECTIVE STUDY

Background:

Primary teeth are vital for children's oral health, serving roles in chewing, speech development, and spacing for permanent teeth. This study assesses parents' knowledge, attitudes, and perceptions regarding pulp therapy for primary teeth in Puducherry.

Objective :

The aim of the study was to assess and analyse the pattern of dental treatment services provided and also to find the common treatment chosen by the parents.

Materials and Methods :

A Retrospective study was conducted by auditing the clinical records of 4500 patients aged 4-7 years who visited and had treatment in Sri Venkateshwaraa Dental College , Department of Pediatric and Preventive Dentistry from January 2022 to December 2024.

Results:

Out of 4500 patients 1300 were males,3200 were females .Extraction (65%)was the most common treatment ,followed by pulpal treatment (35%).Pulpectomy(23%) ,pulpotomy (12%).

Conclusion :

Despite advancements in pediatric dentistry,more children had extraction treatment with less observed utilization of preventive care . Still more awareness to be created among parents about the importance of the primary dentition . An increase in the knowledge of parents can have a direct impact on the oral health of the child and hence should be encouraged. More importance on the maintenance of primary teeth and management of dental caries in children should be brought to the notice of public along with the treatment methods. However, an increase in knowledge will encourage parents to provide even better oral health to their children.

TITLE - NEXT - GEN LOCAL DRUG DELIVERY IN PERIODONTICS.

Introduction:

Periodontitis is an inflammatory disease of the gums characterized by the degeneration of periodontal ligament, the formation of periodontal pocket, and resorption of the alveolar bone, which results in the destruction of the Tooth supporting structures.

AIM:

As we dive into the deep sea of local drug delivery system there emerges the new targeted delivery systems like extracellular vesicles, lipid-based nanoparticles (NPs), metallic NPs, and polymer NPs have been developed. These systems aim to improve the targeting and precision of periodontal treatment while reducing the systemic side effects of antibiotics.

OBJECTIVE:

Currently, the use of local drug delivery systems (LDDSs) as an adjunctive therapy to scaling and root planning (SRP) in periodontitis is a promising strategy, resulting in greater efficacy and fewer adverse effects by controlled drug delivery. Selecting an appropriate bioactive agent and route of administration is the cornerstone of a successful periodontitis treatment plan.

CONCLUSION:

In this context, this review poster focuses on various advancements in LDDs, their application in periodontics along with their advantages.

1) ENHANCING DENTAL AWARENESS THROUGH STATIONERY FOR CHILDREN

The aim is to design and develop a set of educational stationery items for children labelled with good dental practice and aiming to promote healthy dental habits and raise awareness about oral hygiene. Childhood Dental Care is a major concern in children, if dental problems left untreated it may lead to life threatening infections and expensive treatment. We have made a range of stationery items including scale, eraser, sharpener, glue, pencils, labels, crayons and notebooks which are designed and printed with the fun, educational contents highlighting good dental practice. These ideas will help to create comprehensive dental awareness campaign that engages children and promote good oral health habits. "Teach them young, teach them right, healthy teeth shine bright."

2) THE GAME OF HABITS

This project deals with the good and bad habits of Oral health through an innovative game. It is designed to educate common people and children of young ages. The game categorizes behaviour into beneficial practices such as regular brushing, use of mouthwash and dental check ups and harmful habits like excessive sugar consumption, smoking and nail biting. Players engage by identifying and categorizing these habits into positive and negative choices using sorting mechanism like fishing rod model with magnet as hook to catch the habits. It also includes a laminated sheet listing good and bad habits which is bilingual making it accessible to a wider audience. By learning these habits in a fun and competitive format, participants gain a deeper understanding of their impact on oral health. The project aim to empower individuals with knowledge while promoting long-term oral health outcomes.

3) THE DENTAL BOOTH

Oral health is often neglected due to limited access to professional care , lack of awareness and financial constraints . The Dental Booth is an innovative solution designed to provide basic dental aid in public spaces , ensuring accessibility and conveniences . The small , self - contained booth will be strategically placed in high footfall areas such as Railway stations , Airports . It will offer essential dental services , promoting oral hygiene through health education posters . A key feature of the Dental booth is its integration of an automated dental scanner with perform non invasive oral scan to detect scanner , will perform non invasive oral screen to detect common dental problems . The quick and simple diagnosis encourage patients to seek appropriate and early dental care with AI (Artificial intelligence) incorporated to help and gather data for various epidemiological studies by Dental and Public Health resources . The Dental Booth aims to bridge the gap between communities and oral Healthcare, promoting long term dental wellness

4) Oral care jenga

Traditional oral health education can be unengaging for children. To make learning fun, we developed a Jenga-based game that teaches basic oral health practices through play. Each block contains simple tips on dental hygiene do's and don'ts, ensuring kids absorb key information effortlessly. By combining education with play, this project helps children develop healthy habits in an enjoyable and interactive way.

5) PROTECT YOUR CROWN, PROTECT YOUR LIFE

Wearing a helmet is a crucial safety measure that not only protects the brain but also plays a significant role in safeguarding dental health. Road accidents and falls often result in facial trauma, leading to broken teeth, jaw fractures, and soft tissue injuries. Helmets act as a protective shield by absorbing impact forces, reducing the risk of dental and maxillofacial injuries. Helmet users experience fewer dental traumas compared to non-users, emphasizing their role in preserving oral health and reduces the need for expensive and painful treatments such as dental implants, reconstructive surgery, and long-term orthodontic care. Therefore, promoting helmet use is essential not just for oral health but indeed contribute to prolonging longevity.

"Helmet On, Safety On"

AWARD WINNERS

FACULTY ABSTRACTS

S.no	Name	Type of presentation	Prize	Title
1	Dr Hidhaya	Paper	First Prize	Sustainable orthodontic treatment: need of the hour
2	Dr Keerthana Rao	Paper	Second Prize	Conservative approaches to odontogenic keratocysts: a case series of three distinct treatment modalities

PG ABSTRACTS PAPER

S.no	Name	Type of presentation	Prize	Title
1	Dr.Akansha (prostho)	Paper	First Prize	Artificial intelligence in dentistry - the future of oral healthcare
2	Dr Rubini (pedo)	Paper	Second Prize	Knowledge, awareness and practice towards oil pulling as an oral hygiene aid among parents of children – a cross-sectional survey

PG ABSTRACTS POSTER

S.no	Name	Type of presentation	Prize	Title
1	Dr. Kaviya (Perio)	Poster	First Prize	Next – gen local drug delivery in periodontics
2	Dr Kiruthiga(ortho)	Poster	Second Prize	Lateral incisor bracket positioning in ugly duckling stage

AWARD WINNING ABSTRACTS

S. NO	Name & Department	Title
1	Dr. G. Jamunarani	Effectiveness Of Senobi Breathing Exercise On Reduction Of Perimenopausal Symptoms Among Perimenopausal Women
2	Dr. S. Rathi Devi	Explore The Perception and to Evaluate the Effectiveness of Safety Education on Child Sexual Abuse Among Parents of School Children.
3	Ms. Sariha.V Prof. Dr.R. Rajeswari,	Prevalence And The Effectiveness Of Video Assisted Teaching On Knowledge About Prevention Of Diabetic Neuropathy Among Patients With Diabetes At Svmch & Rc, Puducherry.
4	Ms. Dhivya. R Prof. Dr. Rathidevi. S	A Study To Assess The Correlation Between The Sleep Hygiene And Quality Of Life Among Young Adults At Selected Villages, Puducherry

Original Article

EFFECTIVENESS OF SENOBI BREATHING EXERCISE ON REDUCTION OF PERIMENOPAUSAL SYMPTOMS AMONG PERIMENOPAUSAL WOMEN

Dr. G. Jamunarani

Indirani college of nursing, Ariyur.

BACKGROUND:

A study to assess the effectiveness of senobi breathing exercise on reduction of perimenopausal symptoms among perimenopausal women.

METHODOLOGY:

Quasi experimental research design was used to conduct the study. Totally 292 samples with the age group of 40 to 55 years were selected by multistage sampling technique. The symptoms were assessed with perceived stress scale, Climatic scale and WHO BMI scale. The experimental group were received lecture cum demonstration of senobi breathing exercise for a week and the control group received routine care. Posttests were conducted for both group on 30th & 90th day respectively.

RESULTS:

The results showed that the intensity of perimenopausal symptoms were found to be in experimental group, 16.7%, 18.1%, 9 %, 3.5%, 37.7%, 2.8% of the samples perceived high level of perimenopausal symptoms and they belong to obese - I category. Whereas in the control group 9.7%, 7.6%, 9%, 18.8%, 32.8%, 23% of the women perceived high level of perimenopausal symptoms and they belong to overweight category respectively. The mean and SD scores for stress were 5.7 ± 3.2 , 16.8 ± 8.5 , and the t value of 14.5. Climatic symptoms: anxiety scores were 2.7 ± 2.2 , 7.3 ± 4.2 , and the t value of 11.3. Depression scores were 2.9 ± 2.1 , 7.1 ± 3.5 , and the t value of 12.0. Somatic symptoms scores were 3.0 ± 2.2 , 6.5 ± 3.5 , and the t value of 10.1. Vasomotor symptoms scores were -1.2 ± 1.1 , 4.2 ± 1.8 , and the t value of 16.7. BMI scores were 23.0 ± 2.5 , 22.8 ± 2.6 , and the t value of 0.4. There was significant changes present in between the group in all the domains at the p level of <0.0001 . There was positive correlation found with perimenopausal symptoms with each other symptoms. This study concluded that senobi breathing exercise is very effective intervention in reducing the perimenopausal symptoms like stress, anxiety, depression, somatic symptoms vasomotor symptoms and BMI.

KEY WORDS: Perimenopause, Perceived Stress, Climatic symptoms.

Original Article

EXPLORE THE PERCEPTION AND TO EVALUATE THE EFFECTIVENESS OF SAFETY EDUCATION ON CHILD SEXUAL ABUSE AMONG PARENTS OF SCHOOL CHILDREN.

Dr. S. Rathi Devi

Indirani college of nursing, Ariyur.

BACKGROUND:

Child Sexual Abuse (CSA) is the fastest leading growing problem in all over the world. It is a complex phenomenon, in which it is stressful for both child and the care taker especially mother in all aspects of child life. It leads to variety of physical and mental health problems in childhood stages. The effects of childhood sexual abuse will leads to stress during the first few years which in turn end up in critical period for brain development. Child sexual abuse is a peculiar problem in that often the people who are expected to protect and nurture the child are involved. This paradox makes it difficult to accept and much easier to blame strangers for the problem.

AIMS AND OBJECTIVES OF THE STUDY:

The aim of the study was to explore the perception and to evaluate the effectiveness of safety education on child sexual abuse among parents of schoolchildren.

The Objectives of the study were

To explore the perception of child sexual abuse among the parents of school children.

To assess the knowledge and behavior regarding child sexual abuse among the parents of school children.

To evaluate the effectiveness of safety education on the knowledge and behaviour regarding child sexual abuse among parents of schoolchildren.

To correlate the relationship between the knowledge and behavior regarding child sexual abuse among the parents of schoolchildren.

To associate between the knowledge regarding child sexual abuse with the selected demographic variables.

To associate between the behavior of child sexual abuse with the selected demographic variables.

RESEARCH METHODOLOGY:

The mixed methodological approach with sequential exploratory research design was used. In that qualitative part of the study was done by phenomenological research design and quantitative part was done by true experimental design. The setting of the current study was conducted at adopted community rural areas of Sri Venkateshwaraa Medical College and research Center, Puducherry with the radius of 10 km. Five villages were allotted in each group using the lottery method. Parallel sampling technique was used to select the samples for the study. According to the sampling criteria, 42 participants were recruited for the qualitative study through maximum variation sampling, 430 samples were recruited for the quantitative study in which 216 were allotted to the study group and 214 were allotted to the control group through systematic random sampling technique. The tools used for the study were validated and reliability established.

Focus group discussion was carried out to explore the perception of parents on child sexual abuse through open ended questions.

Original Article

EXPLORE THE PERCEPTION AND TO EVALUATE THE EFFECTIVENESS OF SAFETY EDUCATION ON CHILD SEXUAL ABUSE AMONG PARENTS OF SCHOOL CHILDREN.

Structured questionnaire and rating scale was used to assess the knowledge and behaviour on child sexual abuse in the pre test and post test among the parents of school children. Safety education was provided to the parents of school children in the study group. The data were analyzed using descriptive, inferential statistical methods and interpreted based on the objectives and hypotheses of the study.

RESULTS:

The study findings revealed that through the qualitative exploration, majority of the parents focused on the following themes and concepts. They perceive the risk with high variability and they revealed it will be high for females and high for the general population and very low for their own children. They perceived the concept of child sexual abuse as only sexual intercourse. They also focused on causes as poor parenting, leaving the children alone in the home and wearing western and modern dresses. They conversed clearly about the consequences of child sexual abuse physiologically and psychologically. Parents don't want to disclose the issue, because of shame and fear of marriage. Cost, corruption, distance are all the hindering factors that parents perceived as barriers in help seeking behavior.

In the part of quantitative estimation of effectiveness of safety education on knowledge and behavior regarding child sexual abuse among the parents, of school children, the result showed that there was significant improvement in knowledge and behavior among the parents at $P < 0.001$ in the study group and no improvement were seen among the control group.

There is a significant moderate positive correlation between knowledge gain score and behavior gain score among the experimental group. It means knowledge gain score increases their behavior score also increase moderately among the experimental group. ($r=0.52$)

In the association between knowledge gain score with the selected demographic variables among the study group showed that parents with the age more than 25 years, educational status above primary level, monthly income more than Rs.5000 had gained more knowledge than others. Adjusted odds ratio was given with 95% confidence interval. None of the variables were significantly associated in the control group.

In the association between behavior gain score with the selected demographic variables among the study group showed Elders, more educated, more monthly income, nuclear family, more children parents gained more behaviour score. None of the variables were significantly associated in the control group.

CONCLUSION:

The present study concludes that the Safety Education was effective in increasing the knowledge and modifying the behaviour among parents of school children regarding prevention of child sexual abuse. Hence the study suggested that safety education is an effective module in promotion of healthy life and prevention of sexual abuse.

Keywords: Child Sexual Abuse, Parents of School Children.

Original Article

PREVALENCE AND THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE ABOUT PREVENTION OF DIABETIC NEUROPATHY AMONG PATIENTS WITH DIABETES AT SVMCH & RC, PUDUCHERRY.

Ms. Sariha.V, Prof. Dr.R. Rajeswari,

Department of Medical Surgical Nursing, Indirani College of Nursing.

BACKGROUND:

Diabetic neuropathy refers to a group of diseases that affect all types of nerves, including peripheral (sensorimotor), autonomic, and spinal nerves. The disorders appear to be clinically diverse and depend on the location of the affected nerve cells. The prevalence increases with the age of the patient and the duration of the disease.

Materials and methods:

The research approach selected for the study was a quantitative approach with quasi experimental pretest and posttest design. The 60 samples were selected through a non-probability purposive sampling technique. In that 30 samples for study group and 30 samples for control group. Prevalence of diabetic neuropathy was identified by using Michigan neuropathy screening checklist. Pretest done with the structured knowledge questionnaire for both the groups. Video assisted teaching was provided to the study group with video presentation and control group received routine care. Posttest was done to both the groups on the 7th day with the same data collection instruments. The collected data were analyzed based on the above mentioned objectives using descriptive and inferential statistics.

RESULTS:

Regarding the prevalence of diabetic neuropathy, 44 (73.33%) were categorized as "Normal" and 16 (26.67%) were categorized as diabetic neuropathy. The frequency and percentage distribution of demographic variables among study group showed that 16(53.3%) were aged between 56 - 60 years, 20(70%) were male and religion 21(70%) were Hindus. Regarding marital status 27(90%) were married. Among the samples 13(43.4%) had primary education, 14(46.7%) were self employed. About the type of family 17(56.7%) were belong to joint family and regarding family monthly income 10(33.3%) were earning Rs.10,001 to Rs.20,000 per month. Regarding place of residence, 21(70%) were residing in rural area. Similarly in the control group, 17(56.7%) were aged between 56 - 60 years, 20(70%) were male, 23(76.7%) were in Hindus. Majority 28(93.3%) were married, 14(46.7%) had primary education, 13(43.3%) were private employee. About the type of family 18(60%) were belonged to joint family and regarding family monthly income 14(46.7%) were earn Rs.10,001 to Rs.20,000 per month and 21(70%) were residing in rural area.

Regarding clinical variables among study group revealed that 14(46.7%) were in the height range of 161 to 170 cms, 13(43.3%) were weighing between 56 to 70 kg and 13(43.3%) were weighing >70 kg. About BMI 15(30%) in the range of 25 - 29.9. Regarding types of diabetes 25(83.3%) had type 2 diabetes mellitus and 26(86.7%) had other comorbidities. Regarding the duration and family history 20(66.7%) had diabetes for more than 4 years and 25(83.3%) had family history of diabetes. All 30(100%) had taken diabetic drugs regularly and not taken any other alternative medicines.

Original Article

PREVALENCE AND THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE ABOUT PREVENTION OF DIABETIC NEUROPATHY AMONG PATIENTS WITH DIABETES AT SVMCH & RC, PUDUCHERRY.

In control group, 14(46.7%) were in the height range of 161 to 170 cms and 18(60%) were weighing >70 kgs. About BMI 16(53.3%) in the range of 25 - 29.9. Regarding types of diabetes 23(76.7%) had type 2 diabetes mellitus and 28(93.3%) had other comorbidities. Regarding the duration and family history 17(56.7%) more than 4 years and 22(73.3%) had family history of diabetes. All 30(100%) had taken diabetic drugs regularly and not taken any other alternative medicines.

In pretest, among the study group 23(76.67%) had inadequate knowledge and 7(23.33%) had moderately adequate knowledge and where as in posttest, 16(53.33%) had adequate knowledge and 14(46.67%) had moderately adequate knowledge. The pretest mean and SD score were 7.67 ± 4.66 , posttest mean and SD score were 18.10 ± 3.45 . The calculated paired "t" value was 14.05, which was highly statistically significant at p value <0.0001. It was evident that Video Assisted Teaching was effective for enhancing the knowledge about prevention of diabetic neuropathy among the patients with diabetes.

In control group pretest, 18(60%) had inadequate knowledge and 12(40%) had moderately adequate knowledge where as in posttest, 16(53.33%) had inadequate knowledge and 14(46.7%) had moderately adequate knowledge. Pretest mean and SD score were 8.67 ± 4.92 . In posttest mean and SD score were 8.50 ± 5.23 . The calculated paired "t" value was 0.614, which was not statistically significant at p value <0.905. In comparison of posttest mean, standard deviation of knowledge score between the study and control group among patients with diabetes was 18.10 ± 3.45 and 8.50 ± 5.23 . The calculated 't' value was 8.37, which is highly statistically significant at p value <0.0001. Hence hypothesis H1 was accepted. There was a significant association found with the pretest level of knowledge with the selected demographic variables such as Occupation ($\chi^2=7.96$, $p=0.047$). Hence hypothesis H2 was accepted. There was a significant association found with the pretest level of knowledge clinical variables such as Duration of diabetes mellitus ($\chi^2=8.59$, $p=0.035$). Hence hypothesis H3 was accepted.

CONCLUSION

The result of this study concluded that 26.67% of the samples categorized as diabetic neuropathy and the video assisted teaching was effective in enhancing the knowledge about prevention of diabetic neuropathy among patients with diabetes. There was a significant association found between level of knowledge with the occupation and duration of diabetes mellitus.

KEYWORDS

Prevalence, Video Assisted Teaching, Level Of Knowledge, Diabetic Neuropathy, Diabetes.

Original Article

A STUDY TO ASSESS THE CORRELATION BETWEEN THE SLEEP HYGIENE AND QUALITY OF LIFE AMONG YOUNG ADULTS AT SELECTED VILLAGES, PUDUCHERRY

Ms. Dhivya. R, Prof. Dr. Rathidevi. S

Department of Community Health Nursing, Indirani College of Nursing.

BACKGROUND:

Sleep hygiene describes modifiable behaviors and environmental adjustments that can be used to promote sleep quality and improve sleep duration and also refers to a set of practices and habits that can improve an overall well-being it includes a schedule, relaxing bedtime routine, Sleep environment, Limit exposure to screens, diet, manage stress, avoid napping late in the day.

MATERIALS AND METHODS:

A quantitative research approach with correlation design was adapted to assess the sleep hygiene and quality of life among young adults at selected villages, Puducherry. 200 young adults with the age group of 18 to 23 years were selected through systematic random sampling technique. Formal setting permission was obtained from Director Sri Venkateshwara Medical College and Research Institute, HOD of Community Medicine and Institutional Review Committee. Demographic variables were collected by using structured questionnaires and sleep hygiene were assessed by Sleep hygiene Index scale and quality of life were assessed by quality of life enjoyment and satisfaction questionnaire. Collected data were analyzed based on the above mentioned objectives by using descriptive and inferential statistics.

RESULTS:

The study result indicates the frequency and percentage distribution of sleep hygiene among young adults. It shows that 162(81%) had good sleep hygiene, 34(17%) had moderate sleep hygiene and 4(2%) had poor sleep hygiene. The frequency and percentage distribution of level of quality of life among young adults shows that 85(42.5%) had moderate quality of life, 61(30.5) had poor quality of life and 54(27%) had good quality of life. The mean score of sleep hygiene was 20.23 ± 10.11 and the mean score of quality of life was 34.95 ± 6.64 and the correlation was calculated by Karl Pearson's Correlation coefficient and the $r = 0.443$ at the level of significance $p = 0.0001$. It shows a moderate positive correlation between sleep hygiene and quality of life among the young adults. There was significant association between the levels of sleep hygiene among young adults with selected demographic variables. It was observed that the demographic variables such as feeling of depression ($\chi^2=10.638$, $p=0.005$), educational status ($\chi^2=9.624$, $p=0.047$) and feeling of loneliness ($\chi^2=6.095$, $p=0.047$) had statistically significant association with level of sleep hygiene among young adults at $p < 0.01$ level respectively. There was significant association between the level of quality of life among young adults with selected demographic variable age ($\chi^2=14.544$, $p=0.006$).

CONCLUSION:

A study to assess the correlation between the sleep hygiene and quality of life among young adults at selected villages, Puducherry. The result of this study showed that there was moderate positive correlation between sleep hygiene and quality of life among young adults. Hence, hypothesis I was accepted. There was significant association between level of sleep hygiene among young adults with selected demographic variables such as depressive feelings, educational status and feeling of loneliness. Hence, hypothesis II was accepted. There was significant association between levels of quality of life among young adults with selected demographic variable of age. Hence hypothesis III was accepted.

SVCET ABSTRACTS

S. NO	Name & Department	Title
1	Mrs.Thangapriya S	Spectrum sensing methods for Underwater Cognitive Acoustic Sensor Networks
2	Janithaa, Saniya Sru, Shalini	Visual Math - Revolutionizing Math Education with 3D Visualization and AI
3	Shakshitha.m, Vaishnavi.c, Vijayalakshmi.s	The Future Of Sustainable Living: Smart, Self-sufficient Homes
4	T. Ramana (MECH), V. K. Pradhosh (CSE)	Underwater Metal Detector Drone
5	Prathik Pandey Nivetha	Toxigaurd Glucometer
6	Dheepak Dayal Raj Tharun Alim,	AI-assisted Automated Sample Collection In Steel Industries
7	Dheepak Dayal Raj Tharun Alim,	Revolutionizing Hydropower: Innovative Water Pump-driven Electricity Generation
8	Suhaina Begum. A, Charumathi. P, Noorul shifaya. S, Janani.	Smart Car Parking System Using Arduino
9	Pragathi K, Tanzeela sultana, Ushaswini, Priyanka S, Priyanka, Stalin, Nesika,	Kitchen Safety Bot For Flame Detection, Water Spraying, And Gas Leak Alert

ABSTRACT TITLE

Spectrum sensing methods for Underwater Cognitive Acoustic Sensor Networks

Mrs.Thangapriya S., AP/BME,

Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

Underwater Acoustic channel is the most challenging channel in the world due to its time varying and frequency-selective characters. These facts obstruct the realization of most of intelligent and high bit rate underwater communication systems.

To use underwater spectrum efficiently where multiple acoustic systems, co-exist a smart underwater acoustic network should dynamically change the operation parameters (frequency band, modulation scheme, transmission power) according to the environment without causing interference to the licensed primary users.

Cognitive Acoustics is a promising technique to develop an environment friendly UAN (Underwater Acoustic Network) with high spectrum utilization. This paper considers the problem of spectrum sensing and investigates the unique characteristics of existing spectrum sensing methods and their impact on UCAN design. Then analysis of the existing methods and furthermore of sequential cyclo stationary based spectrum sensing in terms of probabilities of false alarm and missed detection is discussed.

ABSTRACT TITLE

Visual Math - Revolutionizing Math Education with 3D Visualization and AI

Janithaa, Saniya Sru, Shalini, Dept. of CSE Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

In today's educational landscape, understanding mathematics remains a significant challenge for many students, often due to the abstract nature of mathematical concepts and reliance on rote memorization. To address this, Visual Math introduces an innovative application that leverages 3D visualization and AI-powered tools to transform the way math is taught and learned. By converting complex equations and concepts into interactive 3D graphs and animations, Visual Math simplifies abstract ideas, making them more tangible and easier to comprehend. The application is built using a robust technical stack, including HTML, CSS, and JavaScript for the frontend, Flask for the backend, and Manim for creating stunning 3D animations. Powered by OpenAI's GPT-4, Visual Math generates real-time explanations and validates equations, enhancing the learning experience. Hosted on Vercel and AWS, the platform ensures scalability and accessibility for users worldwide. Visual Math is designed to benefit students, educators, and institutions by fostering better understanding, engagement, and retention of mathematical concepts. Its unique combination of 3D visualization, AI technology, and interactive learning sets it apart from traditional educational tools. By bridging the gap between confusion and clarity, Visual Math aims to redefine math education for the modern era.

ABSTRACT TITLE

THE FUTURE OF SUSTAINABLE LIVING: SMART, SELF-SUFFICIENT HOMES

SHAKSHITHA.M, VAISHNAVI.C, VIJAYALAKSHMI.S, Dept. of ECE, Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

The evolution of sustainable living is driving the development of smart, self-sufficient homes that integrate cutting-edge technologies with resource-efficient systems. These homes utilize renewable energy sources such as photovoltaic solar panels, wind turbines, and energy storage solutions to achieve grid independence. Advanced energy management systems employing artificial intelligence (AI) and machine learning (ML) optimize consumption patterns, while smart grids facilitate bidirectional energy exchange. Automated water recycling, atmospheric water generation, and greywater treatment systems enhance water sustainability. Smart waste management integrates composting and bio-digesters to minimize landfill contributions. Internet of Things (IoT)-enabled sensors and actuators provide real-time monitoring and predictive analytics to optimize thermal regulation, lighting, and appliance efficiency. Vertical farming, hydroponics, and aquaponics support self-sufficient food production, reducing reliance on external supply chains. This paper examines the architectural, engineering, and technological advancements that enable smart, self-sustaining homes, exploring challenges such as scalability, cost, and integration with existing infrastructure.

ABSTRACT TITLE

UNDERWATER METAL DETECTOR DRONE

T. Ramana (MECH), V. K. Pradhosh (CSE) Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

Underwater metal detector drones are advancing subsea exploration through autonomous and remotely operated systems equipped with high-precision metal detection and navigation technologies. These drones integrate pulse induction (PI) and very low-frequency (VLF) metal detection sensors, along with multi-beam sonar and magnetometers, to enhance detection capabilities in varying underwater conditions. AI-driven sensor fusion and machine learning algorithms improve target classification, noise reduction, and adaptive search patterns. Navigation is facilitated through inertial measurement units (IMUs), Doppler velocity logs (DVL), and GPS-acoustic positioning for precise localization. Onboard processing enables real-time data analysis, object identification, and autonomous decision-making for optimized search missions. Applications span underwater archaeology, shipwreck recovery, military ordinance detection, pipeline and infrastructure inspection, and marine resource exploration. This paper delves into the system architecture, sensor integration, power efficiency, communication protocols, and environmental challenges in developing next-generation underwater metal detector drones.

ABSTRACT TITLE

TOXIGAURD GLUCOMETER

Dharshni and Janani, Dept. of ECE, Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

The ToxiGuard Glucometer is a next-generation blood glucose monitoring device that employs advanced electrochemical biosensing for precise and rapid glucose measurement. It utilizes a microfluidic chip integrated with enzymatic glucose oxidase (GOx) sensors to enhance accuracy while minimizing blood sample volume. The device incorporates impedance spectroscopy and differential pulse voltammetry (DPV) for improved signal processing and noise reduction. AI-driven predictive analytics enable trend analysis, personalized alerts, and early detection of glycemic fluctuations. Wireless communication via Bluetooth Low Energy (BLE) and IoT integration facilitates real-time data synchronization with mobile applications and cloud-based healthcare platforms. A low-power microcontroller and energy-efficient power management system optimize battery life for extended operation. Secure encryption protocols ensure data integrity and compliance with healthcare standards. The ergonomic design includes a high-resolution OLED display and haptic feedback for enhanced user experience. Advanced error detection algorithms minimize inaccuracies due to environmental variations and sample contamination. This paper discusses the sensor architecture, signal processing methods, data security, and clinical validation of the Toxi Guard Glucometer.

ABSTRACT TITLE

AI-ASSISTED AUTOMATED SAMPLE COLLECTION IN STEEL INDUSTRIES

Prathik Pandey and Nivetha Dept. of ECE, Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

AI-assisted automated sample collection in steel industries integrates robotic automation, advanced sensing, and machine learning to enhance precision, repeatability, and safety in metallurgical quality control. The system employs high-temperature-resistant robotic arms equipped with specialized refractory-coated end effectors for accurate extraction of molten metal samples. AI-driven computer vision and thermal imaging sensors optimize sample collection points by analyzing slag distribution, temperature gradients, and metal flow dynamics. Reinforcement learning algorithms adjust sampling frequency based on real-time process parameters, minimizing deviations and ensuring consistency. Closed-loop control systems, powered by PID and adaptive neural networks, enable precise robotic motion and force feedback for stable sample handling. Integrated LiDAR and IMU-based navigation allow autonomous movement in dynamic industrial environments. Data from spectroscopic and laser-induced breakdown spectroscopy (LIBS) analyzers are transmitted via Industrial IoT (IIoT) protocols for real-time compositional analysis and defect detection. Predictive maintenance algorithms utilizing vibration and thermal signature analysis extend robotic system longevity and reliability. Secure edge computing ensures low-latency processing and cybersecurity compliance for industrial networks. This paper discusses the design, sensor fusion techniques, AI models, and real-world deployment challenges of automated sample collection systems in steel manufacturing.

ABSTRACT TITLE

REVOLUTIONIZING HYDROPOWER: INNOVATIVE WATER PUMP-DRIVEN ELECTRICITY GENERATION

Dheepak Dayal Raj & Tharun Alim, Dept. of EEE, Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry.

ABSTRACT:

Revolutionizing hydropower through innovative water pump-driven electricity generation involves the integration of pump-as-turbine (PAT) systems, advanced control algorithms, and energy recovery technologies. Utilizing reverse-operation centrifugal and axial flow pumps, these systems efficiently convert hydraulic energy into mechanical torque for power generation. Computational fluid dynamics (CFD) simulations optimize impeller and diffuser geometries to enhance flow stability and minimize energy losses. AI-driven adaptive control systems, combined with real-time IoT sensor networks, regulate flow rates, pressure variations, and turbine efficiency under varying hydraulic conditions. Power electronics, including variable-frequency drives (VFDs) and maximum power point tracking (MPPT) controllers, ensure dynamic grid synchronization and load balancing. Energy recovery mechanisms leverage excess hydraulic pressure from water distribution networks and industrial pipelines, improving overall system sustainability. Predictive maintenance frameworks employing machine learning analyze vibrational signatures, cavitation effects, and thermodynamic parameters to enhance equipment longevity. Decentralized hydropower configurations enable scalable deployment for off-grid and microgrid applications. Secure edge computing platforms process real-time performance data, ensuring low-latency response and cybersecurity compliance. This paper presents the design, performance optimization strategies, and real-world implementation challenges of water pump-driven electricity generation in modern hydropower infrastructure.

ABSTRACT TITLE

SMART CAR PARKING SYSTEM USING ARDUINO

Suhaina Begum. A, Charumathi. P, Noorul shifaya. S, Janani. S Dept. of CSE,
Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry

ABSTRACT:

The Smart Car Parking System using Arduino integrates embedded systems, sensor networks, and IoT technology to optimize parking space utilization and automate vehicle management. The system employs ultrasonic sensors for real-time slot occupancy detection, interfaced with an Arduino microcontroller for data processing and decision-making. RFID and infrared (IR) modules enable secure vehicle authentication and controlled access through servo motor-driven automated barriers. A real-time display system using LCD and LED indicators provides instant slot availability updates, while Wi-Fi and MQTT protocols facilitate remote monitoring via cloud-based IoT platforms. Edge computing techniques minimize latency in data transmission and enhance real-time responsiveness. Power-efficient solar modules support autonomous operation, reducing dependency on external power sources. Machine learning algorithms analyze historical parking data to predict peak congestion periods and optimize space allocation dynamically. The system incorporates fail-safe mechanisms, including watchdog timers and redundant sensor arrays, ensuring reliability under various environmental conditions. Secure data encryption protocols safeguard communication between IoT nodes and cloud servers, enhancing cybersecurity. This paper explores the hardware-software co-design, real-time data acquisition, and networked control architecture of an Arduino-based smart parking system.

ABSTRACT TITLE

KITCHEN SAFETY BOT FOR FLAME DETECTION, WATER SPRAYING, AND GAS LEAK ALERT

Pragathi K, Tanzeela sultana, Ushaswini, Priyanka S, Priyanka, Stalin, Nesika,
Dept. of CSE, Sri Venkateshwaraa College of Engineering and Technology, Ariyur, Puducherry.

ABSTRACT:

The Kitchen Safety Bot is an autonomous fire and gas leak detection system integrating embedded electronics, sensor fusion, and real-time actuation mechanisms. The system employs infrared (IR)-based flame sensors and thermocouples interfaced with a microcontroller (Arduino or Raspberry Pi) to detect fire incidents with high accuracy. A solenoid valve-controlled water spraying system, actuated through relay modules, ensures rapid fire suppression. Gas leak detection is implemented using metal oxide semiconductor (MOS) sensors such as MQ-2 and MQ-5, which continuously monitor ambient air for hazardous gas concentrations. IoT-enabled wireless communication, utilizing MQTT or HTTP protocols, transmits real-time alerts to mobile applications and cloud-based dashboards. A fail-safe mechanism incorporating audible buzzers, high-intensity LED indicators, and SMS-based notifications via GSM modules ensures multi-channel warning dissemination. AI-driven anomaly detection algorithms, based on pattern recognition and sensor data fusion, minimize false positives and enhance response accuracy. Edge computing techniques process critical safety decisions locally, reducing latency and dependence on cloud resources. An uninterrupted power supply (UPS) system with lithium-polymer (LiPo) batteries ensures system reliability during power outages. This paper explores the hardware architecture, communication protocols, AI-based hazard assessment, and real-world implementation of the Kitchen Safety Bot for enhanced fire prevention and gas leak mitigation.

FACULTY ORAL PRESENTATION

S. NO	Name & Department	Title
1	Mr. Sathishkumar. D OTAT	Influencing Factors For Acceptance of Labour Analgesia in Antenatal Women
2	Mrs. G. SELAMBARASI MLT	Artificial Intelligence in Clinical Laboratory Management
3	Ms. ANBUOLI A OPTOM	Prevalence of Ocular Trauma in Rural Population

STUDENT E POSTER PRESENTATION

S. NO	Name & Department	Title
DEPARTMENT OF MLT		
1	Ms.A. Vishnusri Final Year	Contraindication and Stewardship of Gestational Diabetes Mellitus During and Post Parturiency
2	Ms.Haseena Begam A Final year	Imperilment and Superintendence of Opportunistic Invasive Mycosis in Humans
3	Ms.Kalpana Final year	Pathophysiology and Management of Urticaria
4	G.Narkees Banu M.Pooja. Second year	Technological Advances in Transfusion Medicin
5	Jannathul Fathima Second year	Recent Advancements In Laboratory Automation Technology And Their Impact-
6	S.Juvanna Shiny Second year	A Review Article On Blood Components Preparation
7	Shayima A, Asma Parvin R Second year	A Comparative Study of Microwave Oven-Assisted Tissue Processing and Conventional Method Of Tissue Processing On Turnaround Laboratory Time And Morphological Quality Of Tissue Sections
8	M. Leeladevi Second year	Diagnostic Utility And Performance Of Rapid Antigen Test In Sars Cov 2 In Symptomatic And Asymptomatic Patients During The Second Pandemic Wavein Kashmir, North India
9	G.Narkees Banu M.Pooja. Second year	Imperilment and Superintendence of Opportunistic Invasive Mycosis in Humans

SVCPMS - Research Day Presentations.

S. NO	Name & Department	Title
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DEPARTMENT OF OPTOMETRY

10	Pradeepa Jothikuma First Year	Importance of Eye Donation
11	R.Yamuna First Year	Essential Tips for Maintaining Healthy Eyes

DEPARTMENT OF CATH LAB TECHNOLOGY

12	Ms.Keerthana.B First Year	Stem Cell Therapy in Cardio Vascular Disease
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DEPARTMENT OF MRIT

13	Mr.Sendhilkumar First Year	A Glimpse On Acute Coronary Syndrome
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DEPARTMENT OF MRIT

14	Ms. Yasmin Nisha J First Year	Positioning Techniques in Chest Radiography for Optimal Image Quality
15	Ms.Dhivya S First Year	Fluoroscopy in Gastrointestinal Imaging: Techniques, Applications, And Advancements
16	Ms. Arthi C First Year	Advancements In Breast Imaging: The Role of Mammography
17	Mr. Sriram.V First Year	Personal Protective Equipment in Radiology: Ensuring Safety for Patients and Staff
18	Mr. Nandini C First Year	Radiation-Matter Interactions: Principles and Applications In Imaging And Safety
19	Mr. Bharath Kumar J First Year	Wilhelm Roentgen and The Discovery of X-Rays: A Revolution In Medical Imaging
20	Ms.Yuvasri.A First Year	The Electromagnetic Spectrum: Applications and Advancements in Science and Technology
21	Ms.Z. Nasima Banu First Year	The Physics of X-Ray Production: A Comprehensive Guide
22	Ms. Najula Parveen. B First Year	Understanding Radioactivity: Types, Mechanisms, And Applications
23	Ms. Akilandeswari P Scnd Year	Quality Assurance in Computed Tomography: Reducing Risks and Improving Diagnostic Accuracy
24	Ms. Sabithra V Second Year	Computed Tomography: Principles, Components, And Advancements in Imaging
25	Ms. Rajeshwari Third Year	Radiological Insights into Cardiac Electrophysiology: Imaging The Heart's Electrical Activity
26	S.Hema Third Year	Percutaneous Transluminal Coronary Angioplasty

DEPARTMENT OF AECT

27	Mr.Vinnarasan First Year	Understanding Stroke: Causes, Risk Factors, Symptoms, And Prevention
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ABSTRACT TITLE

INFLUENCING FACTORS FOR ACCEPTANCE OF LABOUR ANALGESIA IN ANTENATAL WOMEN - A CROSS-SECTIONAL STUDY

Mr. SathishKumar D, Associate Professor Department of OTAT,
Sri Venkateshwaraa College of Paramedical Sciences

Background:

Labor pain is one of the most intense painful experiences in a woman's life. Labour analgesia has been a significant advancement in obstetric care for over fifty years, offering relief to delivering mothers. Various pharmacological and non-pharmacological methods are available; however, providing effective and safe pain relief during labour remains challenging due to prevailing myths and controversies. A lack of awareness among pregnant women about labour analgesia can impact maternal and fetal outcomes.

Aim:

This study aimed to assess the factors influencing the acceptance of labour analgesia among antenatal women and to evaluate the impact of antenatal counseling on their attitudes and acceptance.

Methodology:

This cross-sectional study was conducted at a private medical college and research institute in Puducherry. In the obstetric outpatient department, pamphlets detailing the available modes of labor analgesia were routinely distributed. To assess their effectiveness, a questionnaire evaluating awareness and knowledge was prepared in both English and the local language and distributed to 100 willing antenatal women attending the clinic between November 2022 and January 2023. After collecting responses, the anesthesia team provided counseling on the benefits of labour analgesia. The same questionnaire was then redistributed to another group of antenatal mothers between February 2023 and April 2023, and responses were collected to assess the impact of counseling on their attitudes toward labour analgesia.

Results: Before counseling, 66% of participants were aware of labor analgesia; this increased to 100% after counseling. However, despite increased awareness, only 35% of women accepted labour analgesia. While 90-100% of participants acknowledged the severity of labor pain, only 35% desired a painless delivery. Additionally, 49% of women were discouraged by friends and family, with 1% expressing concerns about backache and 5% worried about potential risks to the baby. Although 99% of participants understood the information provided in the pamphlets, 73% indicated the need for counseling sessions for their family members, as they were a significant source of discouragement.

Conclusion: Although antenatal women recognize the benefits of labour analgesia, various concerns, and external influences limit its acceptance. Increasing awareness through targeted interventions, such as promotional videos and advertisements in public spaces and entertainment areas, may help improve acceptance rates and encourage informed decision-making regarding labor analgesia.

Keywords: Labour analgesia, Modalities, Pain free, Counselling

ABSTRACT TITLE

ARTIFICIAL INTELLIGENCE IN CLINICAL LABORATORY MANAGEMENT

Mrs. G. SELAMBARASI, Assistant Professor, Department of MLT
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

The clinical laboratory is at the heart of a rapidly evolving healthcare ecosystem, where emerging technologies, smart testing, remote monitoring, and data science are playing a central role. Laboratories are transforming, driven by the demand for operational efficiency, sustainable practices, and the integration of multiomics platforms.

Alongside the expanding range of diagnostic tests and the widespread adoption of electronic health records (EHRs), the growing computational power of modern systems has brought increased attention to the potential of "Big Data." Extracting meaningful insights from vast and complex datasets requires advanced artificial intelligence (AI) techniques. AI refers to sophisticated software systems that enable machines to learn, adapt, and even mimic human intelligence and decision-making processes.

In scientific laboratories, AI algorithms can rapidly and accurately process large volumes of data, accelerating data analysis and allowing researchers to derive meaningful conclusions in a fraction of the time required by traditional methods. While AI has the potential to revolutionize laboratory research and diagnostics, ethical considerations must be carefully addressed before widespread implementation. AI should serve as an assistive tool, enhancing decision-making and providing human-like interactions in specific tasks, rather than replacing human expertise.

As AI continues to shape the future of medicine, clinical laboratory management will increasingly adopt multiplexed point-of-care testing. AI-powered systems will strengthen the diagnostic process by bridging the gap between patients and healthcare providers, ultimately reinforcing the laboratory's role as the "Nerve Centre of Diagnosis."

Keywords: Machine Learning, Deep Learning, Neural networks, Big data.

ABSTRACT TITLE

PREVALENCE OF OCULAR TRAUMA IN RURAL POPULATION

Ms. ANBUOLI A, Assistant Professor, Department of Optometry
Sri Venkateshwaraa College of Paramedical Sciences

Aim:

To investigate the prevalence of ocular trauma in a rural population.

Design:

Cross-sectional study.

Methods:

This study included 140 participants. Data were collected using a self-structured questionnaire consisting of 15 questions. Participants aged between 15 and 55 years were included, while those below 15 and above 55 years were excluded. Standard descriptive statistical methods were applied, and data were presented as mean \pm standard deviation where appropriate.

Results: According to the inclusion criteria, 140 out of 150 individuals were identified as having ocular trauma. Among them, 52.9% (n=74) were males, and 47.1% (n=66) were females, indicating that ocular trauma is more common in men than in women. The right eye was affected in 55.7% (n=78) of cases, while the left eye was injured in 44.3% (n=62). Additionally, 16.8% (n=22) of cases were due to chemical injuries. Ocular trauma was found to be prevalent across various occupations.

Conclusion: The study identified the environment as the most common source of ocular trauma, with the highest incidence observed in males aged 15 to 30 years. The findings suggest that individuals in the most active and productive age groups are more prone to injuries that can lead to cosmetic deformities and significant economic consequences for the community. Males are more likely to experience ocular trauma due to increased exposure and risk-taking behavior.

Keywords:

Ocular Trauma, Eye Injury, Environmental Eye Injury, Chemical Eye injury

ABSTRACT TITLE

POSITIONING TECHNIQUES IN CHEST RADIOGRAPHY FOR OPTIMAL IMAGE QUALITY

Ms. Yasmin Nisha J, Department of MRIT - I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Chest radiography is a fundamental imaging modality for diagnosing thoracic diseases, requiring precise positioning techniques to achieve optimal image quality. Proper positioning ensures accurate visualization of anatomical structures, minimizes distortion, and reduces radiation exposure.

The primary projections in chest radiography include the posteroanterior (PA) and lateral views, with anteroposterior (AP) and specialized projections utilized when necessary. Key factors influencing image quality include patient alignment, beam angulation, adequate inspiration, and the use of positioning aids. Correct positioning enhances the visibility of lung fields, the heart, diaphragm, and bony thoracic structures while preventing superimposition and motion artifacts.

Poor positioning can lead to diagnostic errors, necessitating repeat exposures, and increasing radiation dose. To optimize image quality, radiologic technologists must adhere to standardized protocols, assess patient cooperation, and adjust techniques based on individual patient conditions. Advanced methods, such as erect positioning for better lung expansion and horizontal beam projections for detecting pleural effusions, further enhance diagnostic accuracy.

Continuous education and adherence to best practices are essential for improving radiographic outcomes. This paper explores the significance of positioning techniques in chest radiography, emphasizing best practices that ensure high-quality imaging while prioritizing patient safety and diagnostic efficiency.

Keywords:

Chest radiography, Image quality, High-resolution, computed tomography, Quality control checklist

ABSTRACT TITLE

QUALITY ASSURANCE IN COMPUTED TOMOGRAPHY: REDUCING RISKS AND IMPROVING DIAGNOSTIC ACCURACY

Ms. Akilandeswari P, Department of MRIT – II Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Quality assurance (QA) in computed tomography (CT) is essential for ensuring the accuracy, safety, and reliability of CT imaging systems. As a cornerstone of modern medical diagnostics, CT technology requires stringent image quality standards while minimizing radiation exposure to patients.

QA in CT involves systematic evaluations, including hardware performance testing, calibration of imaging parameters, and routine monitoring of radiation dose output. Key metrics such as spatial resolution, contrast resolution, noise levels, and dose accuracy are assessed to ensure compliance with regulatory standards and optimal diagnostic performance. QA protocols are guided by organizations like the American Association of Physicists in Medicine (AAPM) and the International Electrotechnical Commission (IEC).

Advances in CT technology, including iterative reconstruction algorithms and dose reduction techniques, have further underscored the importance of robust QA programs. Additionally, the integration of artificial intelligence (AI) in QA processes is emerging as a promising tool for automating quality checks and enhancing efficiency.

This paper explores the fundamental principles of QA in CT, the methodologies employed, and the challenges in maintaining consistent performance. It also highlights the crucial role of QA in improving patient outcomes and reducing risks associated with CT imaging.

Keywords:

Quality Assurance (QA), Computed Tomography (CT), Radiation Dose, Image Quality, Spatial Resolution

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Keywords:

Quality Assurance (QA), Computed Tomography (CT), Radiation Dose, Image Quality, Spatial Resolution

ABSTRACT TITLE

THE PHYSICS OF X-RAY PRODUCTION: A COMPREHENSIVE GUIDE

Ms. Z. Nasima Banu, Department of MRIT- I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

X-rays are a form of electromagnetic radiation with wavelengths ranging from 0.01 to 10 nanometers. In diagnostic radiology, X-rays have long been used for imaging body tissues and aiding in the diagnosis of diseases.

X-ray generation occurs when electrons are accelerated under a potential difference and converted into electromagnetic radiation. The basic components of an X-ray production system include an X-ray tube (housed in a vacuum) and a generator. The X-ray tube consists of key elements such as a cathode, an anode, a vacuum enclosure, and high-voltage cables, which together form the X-ray generator.

During X-ray production, the cathode filament—positioned within a focusing cup—is heated, causing the thermionic emission of electrons. These electrons form an electron cloud around the filament, where repulsion forces prevent their ejection. When a high voltage is applied to both the cathode and anode, the electrons are rapidly accelerated toward the positively charged anode, following a path influenced by the filament and focusing cup.

Keywords:

X-Ray, Cathode Rays, High Voltage Generator, Anode, Vacuum Tube

ABSTRACT TITLE

UNDERSTANDING RADIOACTIVITY: TYPES, MECHANISMS, AND APPLICATIONS

Ms. Najula Parveen. B, Department of MRIT - I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Radioactivity is the process by which unstable atomic nuclei spontaneously emit particles or electromagnetic radiation to achieve stability. This phenomenon occurs in three primary forms: alpha (α) decay, beta (β) decay, and gamma (γ) decay.

Alpha decay involves the emission of a helium nucleus (two protons and two neutrons), reducing both the atomic mass and atomic number of the parent nucleus. Beta decay occurs in two forms: Beta-minus (β^-) decay: A neutron converts into a proton, emitting an electron. Beta-plus (β^+) decay: A proton converts into a neutron, emitting a positron.

Gamma decay releases high-energy electromagnetic radiation without altering the atomic mass or number, often following other decay processes to stabilize the nucleus. Radioactive decay has significant scientific and technological applications. In nuclear energy, radioactive isotopes are harnessed for power generation. In medicine, radioisotopes play a crucial role in diagnostic imaging and cancer treatment. Additionally, radiometric dating utilizes radioactive decay to determine the age of fossils and geological formations. While radioactivity presents potential risks, its controlled use has revolutionized science, technology, and healthcare, underscoring its importance in modern advancements.

Keywords:

Alpha Decay, Beta Decay, Gamma Decay, Electromagnetic Radiation, Nuclear Energy, Medical Imaging,

ABSTRACT TITLE

RADIOLOGICAL INSIGHTS INTO CARDIAC ELECTROPHYSIOLOGY

Ms. RAJESHWARI, Department of MRIT – III Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

The heart's electrophysiology governs its electrical activity, ensuring the initiation and coordination of myocardial contractions for effective blood circulation. This process is driven by the cardiac action potential, a transient change in membrane potential caused by the regulated flow of ions across cardiac cell membranes.

The action potential consists of three key phases: Rapid depolarization, triggered by sodium influx. Plateau phase, maintained by a balance of calcium influx and potassium efflux. Repolarization, dominated by potassium efflux. The sinoatrial (SA) node, located in the right atrium, acts as the heart's primary pacemaker, generating spontaneous action potentials that stimulate atrial contraction.

The impulse then reaches the atrioventricular (AV) node, which introduces a brief delay, allowing optimal ventricular filling. The signal then travels through the His-Purkinje system, ensuring rapid and synchronized ventricular depolarization and contraction. Disruptions in these electrophysiological processes can lead to arrhythmias, affecting cardiac efficiency and increasing the risk of adverse events. Understanding cardiac electrophysiology is crucial for developing targeted interventions and treatments for various heart disorders.

Keywords:

Cardiac Electrophysiology, Sinoatrial Node, Atrioventricular Node, His- Purkinje System, Arrhythmias

ABSTRACT TITLE

FLUOROSCOPY IN GASTROINTESTINAL IMAGING

Ms. DHIVYA S, Department of MRIT – I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Fluoroscopy is a specialized X-ray technique that provides real-time imaging of internal body structures in motion, playing a vital role in gastrointestinal (GI) examinations. This dynamic imaging method is essential for diagnosing GI tract abnormalities, including ulcers, tumors, reflux, and dysphagia.

Fluoroscopic GI studies are classified into upper and lower GI tests: Upper GI tests (e.g., barium swallow, upper GI series, and small bowel series) involve ingesting a barium-based contrast solution, which outlines the esophagus, stomach, and small intestine on a video monitor. Lower GI tests focus on the large intestine and rectum, where barium is introduced via the rectum. Common procedures include air-contrast barium enema and standard barium enema. These tests provide detailed visualization of the digestive system, aiding in the accurate detection of structural and functional abnormalities.

In addition to fluoroscopic techniques, advanced imaging methods such as CT Colonography, CT Enterography, MRI Enterography, and MRI Colonography offer enhanced diagnostic capabilities. Fluoroscopy remains a crucial imaging tool in gastroenterology, significantly contributing to disease diagnosis and patient management by delivering real-time, high-resolution images of the digestive tract.

Keywords:

Fluoroscopy, Barium, Colonography, Enterography, CT, MRI.

ABSTRACT TITLE

COMPUTED TOMOGRAPHY: PRINCIPLES, COMPONENTS, AND ADVANCEMENTS IN IMAGING

Ms. Sabithra V, Department of MRIT - II Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Computed Tomography (CT) is a revolutionary imaging technology widely used in medical diagnostics and industrial applications. By utilizing X-rays to generate cross-sectional images, CT provides highly precise visualization of internal structures.

A CT system consists of key components: an X-ray generator: Which emits a beam that passes through the object. Detectors: Measure the attenuated radiation. Gantry: Houses the X-ray tube and detectors, rotating around the subject to capture multiple projections.

Data Acquisition System (DAS): Converts analog signals into digital data. Computer system: Processes data using advanced reconstruction algorithms to generate high-resolution images. Modern CT technology integrates slip-ring technology for continuous rotation and iterative reconstruction techniques to enhance image quality while minimizing radiation exposure. Additionally, artificial intelligence (AI) has revolutionized CT imaging by improving diagnostic accuracy, optimizing image processing, and reducing scan times. CT imaging is essential for diagnosing conditions such as cancer, cardiovascular diseases, and trauma, as well as for guiding interventional procedures.

Its non-invasive nature and ability to provide three-dimensional insights make CT an indispensable tool in modern imaging and diagnostics.

Keywords:

Computed Tomography (CT), X-Ray Generator, Detectors, Data acquisition system (DAS)

ABSTRACT TITLE

ADVANCEMENTS IN BREAST IMAGING: THE ROLE OF MAMMOGRAPHY

Ms. Arthi C, Department of MRIT – I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Mammography is the gold standard for breast cancer screening, playing a crucial role in reducing mortality through early detection. This imaging technique uses low-dose X-rays to identify abnormalities in breast tissue, enabling timely diagnosis and treatment. Technological advancements such as digital mammography and diagnostic reference levels (DRLs) have significantly enhanced image quality while minimizing radiation exposure.

Additionally, the integration of deep learning algorithms has improved image interpretation, reduced false positives and negatives, and thereby increased diagnostic accuracy. Despite its proven effectiveness, disparities in access to mammography persist due to socioeconomic and geographic barriers, leading to inconsistent adherence to screening guidelines. Addressing these challenges is essential to ensuring equitable healthcare outcomes for all individuals.

Ongoing research focuses on refining mammographic techniques for better imaging, improving patient comfort during screenings, and developing advanced imaging modalities to enhance diagnostic precision. As technology evolves, mammography remains a vital tool in the early detection and management of breast cancer. Raising awareness and expanding access to screening programs are crucial in maximizing its benefits and ultimately reducing the global burden of breast cancer.

Keywords:

Mammography, Breast cancer screening, Digital mammography, Diagnostic reference levels, Deep learning algorithms

ABSTRACT TITLE

PERSONAL PROTECTIVE EQUIPMENT IN RADIOLOGY: ENSURING SAFETY FOR PATIENTS AND STAFF

Mr. Sriram. V, Department of MRIT – I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Radiology protective equipment is essential for minimizing radiation exposure in both patients and healthcare professionals during diagnostic imaging procedures. Prolonged or excessive exposure to ionizing radiation poses significant health risks, including tissue damage, cancer, and genetic mutations.

To mitigate these risks, various protective measures are widely used in clinical settings, including Lead aprons, Thyroid shields, Gonad shields, Lead glasses, and Protective barriers. Advances in material science have led to the development of lightweight, more effective protective gear, improving comfort and compliance.

Additionally, innovations in design and technology have enhanced radiation attenuation without compromising mobility or diagnostic accuracy. Ensuring strict adherence to radiation safety protocols is crucial for maintaining a safe working environment while optimizing imaging quality.

Future research aims to further refine protective materials, incorporating ergonomic and cost-effective solutions to encourage widespread adoption in healthcare facilities. As radiology evolves, integrating advanced protective measures remains vital for safeguarding health while maintaining the effectiveness of medical imaging.

Keywords:

Radiology protective equipment, Radiation safety, Diagnostic imaging, Lead aprons, Thyroid shields.

ABSTRACT TITLE

RADIATION-MATTER INTERACTIONS: PRINCIPLES AND APPLICATIONS IN IMAGING AND SAFETY

Ms. NANDINI C, Department of MRIT - I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Radiation interacts with matter in diverse ways, influencing fields such as nuclear physics, medical imaging, and radiation safety. As radiation passes through a material, it interacts with electrons and atomic nuclei, leading to energy loss and various effects.

Types of Radiation Interactions include Charged particles (alpha and beta radiation) that lose energy gradually through ionization and excitation of surrounding atoms. Play a crucial role in radiation shielding, dosimetry, and biological effects of exposure. Uncharged particles (X-rays and gamma rays): Interact via photoelectric absorption, Compton scattering, or pair production, depending on energy levels. Fundamental to X-ray radiography and radiation therapy. Neutrons: Interact mainly with atomic nuclei, often triggering nuclear reactions and emitting secondary particles. Essential in nuclear reactors, radiation shielding, and neutron therapy.

Applications & Importance: Understanding radiation-matter interactions is crucial for: Radiation protection in medical and industrial settings. Detector design for precise imaging and monitoring. Medical treatments, including CT scans and cancer radiotherapy. As technology advances, deeper knowledge of radiation interactions helps us harness its benefits while minimizing risks, ensuring safer and more effective applications in diagnostics, therapy, and nuclear industries.

Keywords:

Energy Loss, Pair Production, Shell Electron, Atomic Electron, Cherenkov radiation.

ABSTRACT TITLE

WILHELM ROENTGEN AND THE DISCOVERY OF X-RAYS: A REVOLUTION IN MEDICAL IMAGING

Mr. Bharath Kumar J, Department of MRIT – I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

The discovery of X-rays by Wilhelm Conrad Roentgen in 1895 marked a revolutionary milestone in science and medicine. While experimenting with cathode rays in a vacuum tube, Roentgen observed a mysterious form of radiation capable of penetrating opaque objects and producing shadow images on fluorescent screens. He named this radiation "X-rays," with "X" denoting its unknown nature.

Transformative Impact on Medicine: Roentgen's first X-ray image—his wife's hand, showing bones and a ring—demonstrated the technology's potential for non-invasive medical diagnostics. This groundbreaking discovery led to the birth of radiology, fundamentally transforming medical imaging. Recognizing its profound significance, Roentgen was awarded the first Nobel Prize in Physics in 1901. Applications beyond Medicine and beyond healthcare include X-rays have become indispensable in various fields: Material science – analyzing atomic structures and detecting material defects. Security screening – inspecting baggage and cargo for concealed objects.

Industrial testing – ensuring quality control in manufacturing. **Evolution and Safety Considerations:** Early applications of X-rays lacked awareness of radiation risks, leading to concerns about exposure-related health effects. Over time, advancements in radiation protection protocols and technologies—such as computed tomography (CT), digital radiography, and dose optimization techniques—have significantly improved both safety and diagnostic precision. **Enduring Legacy:** Roentgen's discovery continues to shape modern science and technology, proving to be one of the most significant breakthroughs in medical history. Today, X-ray technology remains a cornerstone of diagnostics, driving innovations in healthcare, research, and industrial applications worldwide.

Keywords:

X-rays, Wilhelm Conrad Roentgen, Radiology, Cathode Rays, Radiation, Medical Imaging, Nobel Prize, Computed Tomography (CT), Digital Radiography, Radiation Safety.

ABSTRACT TITLE

THE ELECTROMAGNETIC SPECTRUM: APPLICATIONS AND ADVANCEMENTS IN SCIENCE AND TECHNOLOGY

Ms. YUVASRI.A , Department of MRIT - I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

The electromagnetic spectrum encompasses all forms of electromagnetic radiation, categorized by wavelength and frequency. It includes: Radio waves and microwaves – essential for communication technologies, such as broadcasting, Wi-Fi, and satellite transmissions. Infrared radiation – widely used in thermal imaging, remote sensing, and night vision technologies. Visible light – the only part of the spectrum perceivable by the human eye, forming the basis of optics and photography. Ultraviolet (UV) radiation – crucial for sterilization, forensic analysis, and studying astronomical phenomena. X-rays and gamma rays – extensively used in medical imaging (X-rays, CT scans) and cancer treatment (radiotherapy). Applications Across Science and Technology.

The electromagnetic spectrum is fundamental to numerous scientific and technological advancements: Medical Imaging & Treatments – X-rays and gamma rays aid in diagnostics and cancer therapies. Telecommunications – Radio waves and microwaves drive wireless communication, TV broadcasting, and GPS systems. Astronomy & Space Exploration – Different wavelengths help scientists study celestial objects and uncover cosmic mysteries. Engineering & Physics – Innovations in laser technology, spectroscopy, and quantum mechanics stem from electromagnetic wave studies.

A Key to Scientific Progress: By studying electromagnetic waves across different spectral regimes, researchers continue to drive breakthroughs in medicine, physics, and engineering. The electromagnetic spectrum not only enhances everyday technologies but also serves as a cornerstone for space exploration, astronomy, and cutting-edge research.

Keywords:

Electromagnetic Spectrum, Radio Waves, Microwaves, Infrared, Visible Light, Ultraviolet Rays, X-rays, Gamma Rays.

ABSTRACT TITLE

PERCUTANEOUS TRANSLUMINAL CORONARY ANGIOPLASTY

S. HEMA, Department of MRIT – III Year

Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Percutaneous Transluminal Coronary Angioplasty (PTCA) is a minimally invasive procedure used to restore blood flow in patients with atherosclerotic coronary artery disease. It involves threading a catheter with a balloon-tipped device through the femoral or radial artery into a narrowed coronary artery. Once positioned, the balloon is inflated, compressing the plaque against the arterial walls to widen the lumen and improve circulation. In many cases, a stent is placed to maintain vessel patency and reduce the risk of restenosis. Advantages and Advancements: Minimally invasive – Reduces the need for open-heart surgery.

Faster recovery – Patients experience quicker rehabilitation compared to surgical interventions.

Enhanced outcomes – Drug-eluting stents and advanced imaging techniques improve long-term success rates. Challenges and Considerations: While PTCA is a cornerstone of interventional cardiology, potential complications include: Restenosis – Re-narrowing of the artery despite stent placement.

Thrombosis – Blood clot formation within the stent. Arterial dissection – Tearing of the arterial wall during the procedure. Careful patient selection, pre-procedural planning, and post-procedural management are essential for optimizing success rates and reducing complications. Conclusion: PTCA remains a life-saving intervention for patients with acute coronary syndromes and chronic ischemic heart disease. Ongoing research and technological advancements continue to enhance its safety, efficacy, and long-term patient outcomes.

Keywords:

Percutaneous Transluminal Coronary Angioplasty, PTCA, coronary artery disease, stent placement, balloon angioplasty, interventional cardiology.

ABSTRACT TITLE

EYE DONATION: A GIFT OF SIGHT

Prathepa Jothikumar, Department of Optometry -I Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Eye donation is a life-changing act that restores vision for individuals suffering from corneal blindness. Millions worldwide lose their sight due to corneal damage caused by infections, injuries, genetic disorders, and malnutrition. Corneal transplants, made possible through donated eyes, offer a chance to regain vision and significantly improve the quality of life for recipients.

The Need for Eye Donation: Despite advancements in medical science, a severe shortage of donated eyes leaves many visually impaired individuals on waiting lists for transplants. One of the biggest barriers to increasing eye donation is a lack of awareness and the presence of myths and misconceptions. **Common Misconceptions & The Truth.** Myth: Eye donation disfigures the donor's body. Fact: The procedure is quick, respectful, and does not alter appearance. Myth: Religious beliefs prevent eye donation. Fact: Most religions support eye donation as an act of kindness.

Encouraging Eye Donation: Increasing public participation requires education, awareness campaigns, and government initiatives. Hospitals, NGOs, and eye banks play a crucial role in facilitating smooth donation and transplantation processes. **Making a Difference:** By pledging to donate eyes, individuals help reduce avoidable blindness and make a profound social impact. Promoting eye donation as a social responsibility can bridge the gap between demand and supply, allowing more people to experience the gift of sight.

Keywords:

Eye donation, corneal blindness, vision restoration, corneal transplant, eye banks

ABSTRACT TITLE

ESSENTIAL TIPS FOR MAINTAINING HEALTHY EYES

R. Yamuna , Department of Optometry-1 year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Vision plays a fundamental role in daily life, making eye health crucial for overall well-being. With increased screen exposure, environmental pollutants, and lifestyle changes, adopting proper eye care habits is essential to prevent vision problems and maintain long-term ocular health. Nutrition & Hydration. A nutrient-rich diet supports eye function and helps prevent conditions like macular degeneration and dry eyes. Key nutrients include: Vitamin A – Which supports night vision (found in carrots, spinach, and dairy).

Vitamin C & E – Protect against oxidative stress (found in citrus fruits, nuts, and seeds). Omega-3 fatty acids – Reduce dry eyes and inflammation (found in fish, flaxseeds, and walnuts). Staying hydrated, limiting alcohol intake, and quitting smoking further protect against vision deterioration. Regular Eye Check-ups: Routine eye exams help detect issues like refractive errors, glaucoma, and cataracts early, ensuring timely treatment and preventing severe complications. Eye Protection & Digital Wellness: Wear UV-blocking sunglasses to prevent sun damage.

Follow the 20-20-20 rule: Every 20 minutes, take a 20-second break and look 20 feet away to reduce digital eyestrain. Adjust screen brightness, contrast, and distance to minimize discomfort. Blink frequently to keep eyes moist and prevent dryness. Hygiene & Rest: Avoid rubbing your eyes to prevent infections. Wash your hands before touching your eyes or handling contact lenses. Get sufficient sleep to allow the eyes to rest and recover. Conclusion: By adopting healthy eye care practices, individuals can significantly reduce the risk of vision impairment and maintain lifelong ocular health. Raising public awareness and scheduling routine eye exams further enhance preventive strategies for optimal vision.

Keywords:

Eye health, vision care, digital eye strain, UV protection, eye hygiene.

ABSTRACT TITLE

STEM CELL THERAPY IN CARDIOVASCULAR DISEASE

Ms. Keerthana. B, Department of Cath Lab Technology - I Year
Sri Venkateshwaraa College of Paramedical Sciences

Introduction:

Cardiovascular diseases (CVDs), including myocardial infarction, heart failure, and ischemic heart disease, remain leading causes of morbidity and mortality worldwide. Current treatment strategies focus on symptom management and slowing disease progression but fail to restore lost cardiomyocytes. Stem cell therapy offers a promising regenerative approach through cellular replacement, paracrine signaling, and immunomodulation, potentially revolutionizing CVD treatment.

Aim: This poster focuses on the role of stem cell therapy in the treatment and management of cardiovascular illnesses, with a focus on its therapeutic potential, mechanisms of action, and clinical results.

Objectives: Identify key stem cell types used in cardiac therapy, Examine mechanisms of heart tissue regeneration, Evaluate the efficacy and safety of stem cell treatments, and Address challenges and future directions in stem cell-based therapy
Discussion: While preclinical studies demonstrate promising regenerative potential, clinical translation remains challenging. Early trials such as BOOST and REPAIR-AMI reported moderate improvements in left ventricular function, but large-scale studies (TIME, LATE-TIME) showed limited long-term benefits.

Several factors influence treatment outcomes, including Stem cell type (e.g., mesenchymal stem cells, induced pluripotent stem cells) and delivery methods (intracoronary injection, direct myocardial injection), Patient condition, and timing of administration. Recent advancements in genetic modifications, exosome therapy, 3D bioprinting, and CRISPR-Cas9 gene editing aim to enhance stem cell retention and function, potentially overcoming current limitations and improving regenerative efficacy. **Conclusion:** Stem cell therapy holds significant promise for cardiovascular disease treatment, but challenges remain in achieving consistent clinical benefits. Ongoing research and technological innovations are essential to optimize cell selection, refine delivery strategies, and ensure long-term safety and efficacy for widespread clinical application.

Keywords:

Myocardial infarction, heart failure, cardiomyocytes, regenerative potential, left ventricular function.

ABSTRACT TITLE

STEM CELL THERAPY IN CARDIOVASCULAR DISEASE

*Vinnarasan, Department of AECT - I Year
Sri Venkateshwaraa College of Paramedical Sciences*

Abstract:

Stroke is a leading cause of disability and death worldwide, requiring immediate recognition and action to minimize brain damage and improve outcomes. The FAST acronym (Face drooping, Arm weakness, Speech difficulty, Time to call emergency services) is a widely recognized tool for early stroke identification. Rapid intervention, including thrombolytic therapy and mechanical thrombectomy, can significantly improve prognosis if administered within the critical therapeutic window. Public awareness campaigns and healthcare education play a vital role in ensuring timely medical response. This article highlights the importance of recognizing stroke symptoms, the urgency of treatment, and strategies for improving stroke outcomes through prompt action

Keywords:

Stroke, ischemic stroke, hemorrhagic stroke, transient ischemic attack, stroke prevention, stroke treatment.

ABSTRACT TITLE

STEM CELL THERAPY IN CARDIOVASCULAR DISEASE

*Mr. Senthil Kumar. S, Department of OTAT- I Year
Sri Venkateshwaraa College of Paramedical Sciences*

Abstract:

Acute Coronary Syndrome (ACS) is a life-threatening condition resulting from reduced blood flow to the heart, often due to plaque rupture and thrombosis. It encompasses unstable angina, non-ST-elevation myocardial infarction (NSTEMI), and ST-elevation myocardial infarction (STEMI), each requiring urgent medical attention. Early recognition of symptoms, such as chest pain, shortness of breath, and diaphoresis, is crucial for timely intervention. Diagnosis relies on electrocardiography (ECG), cardiac biomarkers, and imaging, while treatment strategies include antiplatelet therapy, anticoagulation, revascularization, and lifestyle modifications. This review provides an overview of ACS, emphasizing early detection, risk stratification, and advances in management to improve patient outcomes.

Keywords:

Acute coronary syndrome, unstable angina, myocardial infarction, morbidity, antithrombotic treatments.

ABSTRACT TITLE

COLLISION AND CHALLENGES OF ANTIMICROBIAL RESISTANCE TO HEALTHCARE

Ms. S. Aswini, Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Antimicrobial resistance (AMR) is a growing global health crisis, threatening the effectiveness of life-saving treatments and increasing the burden on healthcare systems. The overuse and misuse of antibiotics in human medicine, agriculture, and veterinary practice have accelerated the evolution of resistant pathogens, leading to treatment failures and prolonged infections. Multidrug-resistant bacteria, including Methicillin-resistant *Staphylococcus aureus* (MRSA), Extended-spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae, and Carbapenem-resistant organisms, pose significant challenges in clinical settings, increasing morbidity, mortality, and healthcare costs.

The collision between AMR and healthcare systems is evident in the rising demand for alternative therapies, the necessity for robust infection control measures, and the urgent need for new antimicrobial agents. However, the slow pace of antibiotic development, limited diagnostic capabilities, and poor regulatory enforcement exacerbate the crisis. Strengthening antimicrobial stewardship programs, investing in rapid diagnostics, and promoting global collaboration are essential to mitigating the threat of AMR.

This article explores the challenges posed by AMR to modern healthcare, its impact on patient outcomes, and potential strategies to combat this silent pandemic. Immediate action is imperative to preserve the efficacy of existing treatments and safeguard future generations from untreatable infections.

Keywords: Morbidity, Mortality, Surveillance, Antibiotic stewardship, AMR

ABSTRACT TITLE

CONTRAINDICATION AND STEWARDSHIP OF GESTATIONAL DIABETES MELLITUS DURING AND POST PARTURIENCY

Ms. A. Vishnusri, Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Gestational Diabetes Mellitus (GDM) is a common pregnancy complication characterized by glucose intolerance that develops during gestation. If left unmanaged, it poses risks to both the mother and fetus, including macrosomia, preeclampsia, neonatal hypoglycemia, and an increased likelihood of developing type 2 diabetes mellitus postpartum.

Proper stewardship of GDM involves dietary modifications, physical activity, blood glucose monitoring, and pharmacological interventions such as insulin or metformin when necessary. However, contraindications must be considered, as certain oral hypoglycemic agents cross the placenta and may adversely affect fetal development.

During labor, glycemic control is crucial to reducing neonatal complications, necessitating intravenous insulin therapy and continuous monitoring in severe cases. Postpartum care focuses on preventing long-term metabolic disorders, emphasizing lifestyle interventions and regular screening for diabetes in both the mother and child.

This review explores the contraindications in GDM management, the role of clinical stewardship in ensuring optimal maternal and fetal outcomes, and the importance of postpartum follow-up to reduce the risk of future metabolic diseases. A multidisciplinary approach, patient education, and adherence to clinical guidelines are key to effective GDM management during and after pregnancy.

Keywords: Macrosomia, Hypertension, Eclampsia, Hyperglycemia, Hypoglycemia

ABSTRACT TITLE

IMPERILMENT AND SUPERINTENDENCE OF OPPORTUNISTIC INVASIVE MYCOSIS IN HUMANS

Ms. Haseena Begam A , Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Opportunistic invasive mycoses pose a significant threat to immunocompromised individuals, including patients with HIV/AIDS, cancer, organ transplant recipients, and those undergoing prolonged immunosuppressive therapy. These fungal infections, caused by pathogens such as *Aspergillus* spp., *Candida* spp., *Cryptococcus* spp., and Mucorales, often lead to severe morbidity and mortality due to their aggressive nature and diagnostic challenges. The imperilment arises from delayed diagnosis, antifungal resistance, and the limited efficacy of available therapies.

Superintendence of opportunistic invasive mycoses requires a multifaceted approach involving early detection, antifungal stewardship, and individualized treatment regimens. Standard management includes broad-spectrum antifungals like azoles, echinocandins, and polyenes, but therapeutic success is often hindered by drug resistance and host factors. Advances in molecular diagnostics, antifungal susceptibility testing, and prophylactic strategies have improved outcomes, yet gaps in global accessibility and treatment adherence remain.

This review highlights the growing burden of invasive fungal infections, the challenges in their clinical management, and emerging therapeutic strategies. Strengthening infection surveillance, antifungal stewardship, and research into novel antifungal agents is critical to mitigating the rising threat of opportunistic mycoses in vulnerable populations.

Keywords: Immunotherapy, Cystic fibrosis, Neutropenia, Malignancies

ABSTRACT TITLE

PATHOPHYSIOLOGY AND MANAGEMENT OF URTICARIA

Ms. Kalpana, Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Urticaria is a common dermatological condition characterized by transient, pruritic wheals and angioedema due to mast cell and basophil degranulation, leading to the release of histamine, leukotrienes, and other inflammatory mediators. The pathophysiology involves immune (IgE-mediated) and non-immune mechanisms, triggered by allergens, infections, medications, physical stimuli, or autoimmune responses. Chronic urticaria, persisting for more than six weeks, is often associated with autoimmune dysregulation, histamine intolerance, or mast cell activation disorders.

Management focuses on identifying and avoiding triggers, along with pharmacological interventions. First-line treatment includes non-sedating H1-antihistamines, with dose escalation or the addition of H2-antihistamines, leukotriene receptor antagonists, or corticosteroids for refractory cases. In severe chronic urticaria, biologic agents such as omalizumab (anti-IgE monoclonal antibody) and cyclosporine have shown efficacy. Lifestyle modifications, stress management, and patient education play crucial roles in symptom control.

This review discusses the underlying mechanisms, classification, and evidence-based therapeutic approaches for urticaria. Advances in immunomodulatory therapies and targeted treatments offer hope for better disease control and improved quality of life in affected individuals.

Keywords: Histamine, Mast cells, Food allergy, Infections

ABSTRACT TITLE

TECHNOLOGICAL ADVANCES IN TRANSFUSION MEDICINE

G. Narkees Banu , M. Pooja, Department of MLT - II Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Transfusion medicine has undergone significant technological advancements, enhancing the safety, efficacy, and accessibility of blood and blood products. Innovations in blood component separation, pathogen reduction, and genotyping have improved transfusion compatibility and reduced adverse reactions. The advent of automated blood screening, nucleic acid testing (NAT), and next-generation sequencing has enhanced donor screening, minimizing the risk of transfusion-transmitted infections. Emerging technologies such as artificial intelligence (AI)-driven donor management, 3D-printed blood vessels, and stem cell-derived artificial blood hold promise for addressing global blood shortages. Additionally, advances in personalized transfusion strategies, blood storage optimization, and immune-modulatory therapies have improved patient outcomes, particularly in critical care and hematological disorders. This review explores the latest breakthroughs in transfusion medicine, emphasizing their impact on clinical practice, safety standards, and future directions. Continued research and integration of novel biotechnologies are essential to overcoming current challenges and ensuring a sustainable and efficient blood supply system.

Keywords: Advanced blood collection technique, apheresis, pathogen reduction technology, diversion pouch, red cell freezing.

ABSTRACT TITLE

A REVIEW ARTICLE ON BLOOD COMPONENTS PREPARATION

S. Juvanna Shiny, Department of MLT - II Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Blood component preparation is a critical aspect of transfusion medicine, ensuring the optimal use of donated blood while meeting diverse clinical needs. Whole blood is separated into its major components—red blood cells (RBCs), platelets, plasma, and cryoprecipitate—through advanced processing techniques such as centrifugation, apheresis, and filtration. Each component serves specific therapeutic purposes: RBCs for anemia and hemorrhage, platelets for thrombocytopenia, plasma for coagulation disorders, and cryoprecipitate for fibrinogen deficiencies.

Innovations in blood component preparation, including leukoreduction, pathogen inactivation, and extended storage solutions, have improved transfusion safety and efficacy. Automation and closed-system processing have enhanced quality control, minimized contamination risks, and maximized yield. This review provides an in-depth discussion of the methodologies, quality standards, and clinical applications of blood component separation. It also highlights recent advancements and challenges in optimizing blood product availability and storage, ensuring a sustainable and effective transfusion practice.

Keywords: Blood, blood component transfusion, blood components, erythrocyte transfusion.

ABSTRACT TITLE

A COMPARATIVE STUDY OF MICROWAVE OVEN-ASSISTED TISSUE PROCESSING AND CONVENTIONAL METHOD OF TISSUE PROCESSING

Shayima A, Asma Parvin R, Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Introduction: Tissue processing is a crucial step in histopathology, aiming to fix tissues in a solid medium for the preparation of thin sections. The conventional tissue processing method has been the standardized approach for over a century. However, it is time-consuming, with a turnaround time of at least two days for a histopathology report. This study aims to: Develop a tissue processing protocol using a domestic microwave oven. Determine the tissue processing time when using a microwave oven. Compare the morphological quality of tissue slides processed by the microwave method and the conventional automated tissue processor. **Materials and Methods:** The study utilized both the conventional protocol and three microwave-based protocols for tissue processing. A pilot study was conducted to establish baseline timing for the microwave method, set at: Fixation: 2 minutes, Dehydration: 30 minutes, Clearing: 5 minutes, and Wax impregnation: 25 minutes. The total processing time for the microwave protocols was gradually adjusted from 62 minutes to 70 minutes and finally to 77 minutes, by increasing dehydration and wax impregnation time, while fixation and clearing times remained unchanged. **Results:** Microwave Protocol Group 2 produced histological sections closely comparable to the conventional protocol (Group 1). The best morphological quality of histopathology slides was observed when the microwave processing time was 62 minutes.

Conclusion: The most effective microwave tissue processing protocol was Group 2, which yielded superior morphological quality compared to the conventional method. 80% of slides in Group 2 were satisfactory, compared to 76.68% in Group 1. Microwave-assisted processing significantly reduces turnaround time, making it a promising alternative to conventional methods.

Keywords: Tissue processing, microwave, histopathology, morphological quality.

ABSTRACT TITLE

COMBINATION OF MODIFIED CARBAPENEM INACTIVATION METHOD (mCIM) AND EDTA – (eCIM) FOR CARBAPENEMASE PRODUCING ENTEROBACTERALES AND PSEUDOMONAS SPECIES

M. Leeladevi, Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Study background: Infections caused by Enterobacterales and Pseudomonas species are increasingly difficult to treat due to rising antimicrobial resistance. Carbapenems, known as “antibiotics of last resort,” are crucial in treating critically ill patients. However, the emergence of Carbapenem-Resistant Enterobacterales (CRE) and Pseudomonas spp.

(CRP) has become a major public health concern. This study aimed to assess the prevalence of carbapenemase production in these resistant pathogens using the modified Carbapenem Inactivation Method (mCIM) and EDTA-modified CIM (eCIM). Methodology: Following the CLSI 2024 guidelines, both mCIM and eCIM tests were performed on 66 Carbapenem-resistant isolates. For mCIM, a Pseudomonas aeruginosa isolate was incubated with a meropenem disk, and the inactivation effect was tested on E. coli ATCC 25922.

The eCIM test utilized 5 mM EDTA and doubling concentrations to detect carbapenemase production. Results: Results showed that 75% of isolates were serine carbapenemase producers, 41% were metalloβ-lactamase producers, and 30% did not produce carbapenemases. Conclusion: Metalloβ-lactamase production was more prevalent than serine carbapenemase production in these isolates. This highlights the need for effective diagnostic methods to detect these enzymes, which is crucial for better treatment strategies and combating the growing issue of multidrug-resistant bacteria.

Keywords:

Carbapenem resistance, mCIM, eCIM, Enterobacterales, Pseudomonas, carbapenemase production.

ABSTRACT TITLE

RECENT ADVANCEMENTS IN LABORATORY AUTOMATION TECHNOLOGY

M. Leeladevi, Department of MLT - Final Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

This article explores recent advancements in laboratory automation technologies and their transformative impact on scientific research and laboratory protocols. The study examines the integration of robotic sample handling systems, artificial intelligence (AI) and machine learning (ML) algorithms, advanced software and hardware, and safety enhancements in laboratory automation.

The research highlights the key benefits of automation technologies, including improved efficiency, repeatability, and safety in laboratory environments. Additionally, it discusses the broader implications of automation in accelerating scientific discoveries and facilitating the development of innovative treatments and solutions. Despite its advantages, laboratory automation presents challenges such as high implementation costs and technical complexities.

The study further explores future directions in automation, including advancements in robotics, AI, and microfluidics, as well as the potential integration with emerging fields like synthetic biology and precision medicine. In conclusion, this research underscores the critical role of laboratory automation in expanding scientific knowledge and stresses the importance of collaboration among researchers, industry leaders, and policymakers to drive widespread adoption and address associated challenges.

Keywords:

laboratory automation, technology, scientific research, laboratory procedures, advancement.

ABSTRACT TITLE

INNOVATIVE APPROACHES TO DIABETES MANAGEMENT

Ms. Afrina Jacima, Department of OTAT - First Year
Sri Venkateshwaraa College of Paramedical Sciences

Abstract:

Diabetes mellitus is a chronic metabolic disorder requiring continuous management to prevent complications and improve quality of life. Recent advancements in diabetes care have introduced innovative technologies, novel pharmacotherapies, and personalized treatment strategies aimed at optimizing glycemic control and reducing disease burden. Continuous glucose monitoring (CGM) systems and artificial pancreas technology have revolutionized real-time glucose tracking and insulin delivery, enhancing patient autonomy and glycemic stability.

Emerging pharmacological agents, including SGLT2 inhibitors, GLP-1 receptor agonists, and dual incretin therapies, have provided better glycemic control while offering cardiovascular and renal benefits. The integration of digital health solutions, AI-driven decision support, and telemedicine has facilitated remote monitoring, improving adherence and patient outcomes. Furthermore, advancements in stem cell therapy, islet transplantation, and gene editing hold promise for future curative approaches.

This review explores the latest innovations in diabetes management, emphasizing their clinical impact and future potential. A multidisciplinary approach, combining technology, personalized medicine, and patient education, remains key to improving diabetes care and mitigating complications.

Keywords:

Diabetes management, artificial intelligence, continuous glucose monitoring, smart insulin, regenerative medicine, telemedicine, personalized healthcare.

Award Winners - Research Day Presentations.

RESEARCH DAY CELEBRATIONS - 2025

E-POSTER PRESENTATION

WINNER AND RUNNER LIST

STUDENT NAME	DEPARTMENT AND YEAR	PRIZE
Ms. S. Aswini	MLT - Final Year	First
Ms. Jannathul Fathima	MLT - Second year	Second
Ms. R. Rajeshwar	MRIT - Final Year	First
MS. Z. Nasima Banu	MRIT - First Year	Second
Mr. Vinnarasan	AECT - First Year	First
Ms. Keerthana	CLT - First Year	Second

INNOVATIVE MODELS

STUDENT NAME	DEPARTMENT AND YEAR	PRIZE
Ms. Kavitha Ms. Anushree	OPTOM - First year	Winner
Ms. Niranjani Ms. Monika	CLT - First Year	Runner

FACULTY ABSTRACTS

S. NO	Name & Department	TITLE OF THE PRESENTATION
1	J. Dharani Assistant Professor	Beyond the scar: "treating post-surgical elbow stiffness"-case study
2	Dr. Prof. Jeyanthi. S, principal	The digital device era: Exploring cervical angles and proprioception in healthy adolescents
3	M. Malarvizhi, Assistant Professor	Effect of schroth therapy in postural kyphosis among female adolescents
4	G. Subalakshmi, Assistant Professor	Effect of reflex inhibiting postural training on swiss ball to improve functional outcome in lateropulsion after sub acute stroke patients -pilot study
5	Mrs. J. Philomina, Assistant Professor	Analytical study of pelvic floor disability and lower limb strength among cesarean section and normal labor: Pilot study.

Original Article

Beyond the Scar: "Treating Post-Surgical Elbow Stiffness"-Case study

J. Dharani.

Assistant Professor, MPT (Orthopedics)

BACKGROUND:

Elbow stiffness following joint trauma is a common issue, leading to functional impairment of the upper limb. This case report presents a 10-year-old boy who experienced a direct fall on his left elbow, resulting in injury. The patient underwent surgical treatment by an orthopaedic surgeon and later sought physiotherapy for pain and restricted range of motion (ROM) of the elbow. The physiotherapy intervention included electrotherapy and exercise therapy.

Outcome measures, including the Visual Analogue Scale (VAS) for pain and the Oxford Elbow Score (OES), were used to assess progress. After four weeks of treatment with self-made structured exercise protocol, significant improvements were observed, with pain reduction, increased elbow ROM, and an increase in OES from 20 to 39.

These results suggest that physiotherapy plays a vital role in alleviating pain, enhancing range of motion, and improving functional ability in post-traumatic elbow rehabilitation.

KEYWORDS

Elbow stiffness, mobilisation, Oxford elbow score, treatment

Original Article**THE DIGITAL DEVICE ERA: EXPLORING CERVICAL ANGLES AND PROPRIOCEPTION IN HEALTHY ADOLESCENTS**

Dr. Jeyanthi. S Professor,

Dr. Muthukrishnan. P, Assistant Professor, Department of Anatomy,

BACKGROUND: Adolescence is a critical phase of physiological and psychological development, marking the transition from puberty to legal adulthood. Globally, over 1.2 billion individuals belong to this age group. According to UNICEF, India has the largest adolescent population, placing greater responsibility on healthcare professionals to ensure their well-being for the nation's continued growth and development. In today's digitalized world, the increasing use of technology has introduced both positive and negative influences on human biomechanics. While digital advancements enhance accessibility and efficiency, excessive screen time and poor posture associated with prolonged electronic device usage can contribute to musculoskeletal alterations. Various other factors, including lifestyle habits and environmental influences, also play a role in biomechanical changes. Understanding these impacts is essential to developing preventive measures and promoting long-term musculoskeletal health in adolescents.

Purpose: This study aimed to investigate the relationship between digital device usage, cervical angle, and proprioception in adolescents.

Methods: A cross-sectional study was conducted with 400 participants aged 15–19 years. Digital device usage was assessed through a self-reported questionnaire. Cervical angle measurements, including Craniovertebral Angle (CVA) and Sagittal Head Tilt, were analyzed using UTHSCSA software. Proprioception was evaluated through the Cervical Relocation Test. Results: The mean age of participants was 17.01 ± 1.35 years, with an average BMI of 20.54 ± 3.00 . The average duration of digital device usage was 5.98 ± 3.24 hours per day, with smartphones being the most commonly used device, followed by tablets. The mean CVA was 46.69 ± 6.44 , while the Sagittal Head Tilt measured 28.21 ± 5.75 . Cervical rotation proprioception error was recorded at 16.75 ± 9.08 . Although digital device usage showed a positive correlation with neck angles and a negative correlation with proprioception errors, these associations were not statistically significant.

Conclusion: The study highlights the prevalent use of digital devices among adolescents and its potential impact on cervical angles and proprioception. While digital device usage showed a positive correlation with cervical angles and a negative correlation with proprioception accuracy, these associations were not statistically significant. However, prolonged screen time and poor posture may contribute to long-term musculoskeletal issues, emphasizing the need for further research with larger sample sizes and longitudinal studies.

Implications: The findings underscore the importance of promoting awareness about posture and screen time management among adolescents to prevent potential biomechanical alterations. Healthcare professionals, educators, and policymakers should implement strategies such as ergonomic education, posture correction exercises, and digital wellness programs. Incorporating postural training and movement-based interventions in schools and community health programs could help mitigate the adverse effects of prolonged electronic device usage, ensuring better musculoskeletal health in adolescents.

Keywords: Cervical proprioception, cervical angles, Digital device usage

Original Article

EFFECT OF SCHROTH THERAPY IN POSTURAL KYPHOSIS AMONG FEMALE ADOLESCENTS

M. MALARVIZHI MPT Ortho, Assistant Professor.

AIM: To determine the effect of Schroth therapy in postural kyphosis.

MATERIALS AND METHODOLOGY: This study was conducted among women with postural kyphosis, age group of 20 – 40 years. Subjects who participated were diagnosed by the physiotherapist. They were chosen based on the inclusion and exclusion criteria and organised. The proper detailed postural assessment was taken which includes an occiput to wall distance test. A total of 40 subjects were selected. The treatment protocol was 6 – 8 weeks. At the end of 8th week protocol post treatment assessment were again taken. P value and paired t value were used to analyse statistical analysis and the result was concluded.

RESULT: p- value and paired t- value was used to analyse the effect of Schroth method exercise in postnatal kyphosis. There was significant result see in patients with postnatal kyphosis. There was a significant difference in outcome variable OWD.

CONCLUSION: In this present study, there is a significant difference in occiput to wall distance between pre- and post- intervention there was a significant decrease in occiput to wall distance. The structured exercise program designed, has been effective for improving posture in postnatal women.

KEYWORDS: Occiput to wall distance test, postural kyphosis, Schroth method exercise.

Original Article

EFFECT OF REFLEX INHIBITING POSTURAL TRAINING ON SWISS BALL TO IMPROVE FUNCTIONAL OUTCOME IN LATEROPULSION AFTER SUB ACUTE STROKE PATIENTS -PILOT STUDY

Mrs. G. Subalakshmi Assistant Professor.

BACKGROUND: Lateropulsion after stroke is defined as a postural bias toward the paretic side. Incidence commonly occurs in the non-dominant hemisphere lesion, ranges from 10% to 60% of patients with acute stroke, results from affecting the postero-lateral thalamus. Several studies suggest that PS might be caused not only by vertical mismatch also by excessive motor output by the non- paretic limbs and trunk. **OBJECTIVE:** To find the effectiveness of reflex inhibiting postural training on Swiss ball to reduce risk of fall among lateropulsion after sub-acute stroke.

METHODS: A pilot study 10 subjects with lateropulsion allocated into single group pre and post intervention. The subjects received reflex-inhibiting postural training along with traditional exercise for 45 minutes per day for 8 weeks alternatively. Both groups were assessed by using SCP, TCT scale, for executive function and quality of life.

RESULTS: statistical analysis was done by paired't' test for the within group analysis of pre and post intervention. The mean and standard deviation of SCP, pre and post values are 2.71,1.38 and the t value is 10.438.The mean and standard deviation of TCT, pre and post values are 42.0,24.0 and the t value is 6.0020.

CONCLUSION: this study conclude that, reflex inhibiting postural training shows more significant on balance and reduce risk of fall among lateropulsion after stroke.

KEYWORDS: SCP- scale of contraversive pushing, TCT- trunk control test, PS- pusher syndrome.

Original Article

ANALYTICAL STUDY OF PELVIC FLOOR DISABILITY AND LOWER LIMB STRENGTH AMONG CESAREAN SECTION AND NORMAL LABOR: PILOT STUDY.

Mrs. J. Philomina Assistant Professor

Mrs. J. Dharani, Assistant Professor

BACKGROUND:

The rate of C-section deliveries in India increased from 17.2% in 2016 to 21.5% in 2021, In the private sector, these numbers stand at 43.1% (2016) and 49.7% (2021), meaning that nearly one in two deliveries in the private sector is a C-section. The researchers recommend that threshold levels for C-sections be applied cautiously, as several inter-category variations exist, and in states at advanced levels of demographic transition, need factors for C-sections may be more prevalent. C-section is often considered a safer option for women with certain medical conditions, vaginal delivery through normal labor has been associated with its own set of challenges, particularly concerning pelvic floor integrity. Studies found approximately 10% of women will experience some type of pelvic floor disorder which may require surgery, especially related to vaginal delivery.

PURPOSE:

Pelvic pain and strength has been decline in first 3 month of postnatal period. Long term pain and lower limb strength due to mode of delivery which impacts the quality of life is more common in cesarean or normal labour is not known. To analyse pelvic floor disability and lower limb strength among C- section and normal labor.

STUDY DESIGN: Analytical study

METHOD:

The convenient sampling method was used for the collection of samples based on selection criteria. 30 samples for each group selected among 20-35 of age group. The tool used was pelvic floor disability index and modified sphygmomanometer test. Further results are concluded through statistical analysis.

CONCLUSION:

This study concluded that pelvic floor disability and lower limb strength has declined more in normal labor than cesarean section.

KEY NOTE:

Cesarean, Normal labor, Pelvic floor disability, Lower limb strength.

STUDENTS ABSTRACTS

S.NO	NAME OF THE PRESENTATION	TITLE OF THE PRESENTATION
1.	Guruabarnaa. M, mpt 1 st year	Impact of new sensory re-education training on peripheral sensation and hand dexterity among individuals with diabetic neuropathy
2.	Zainab begam. R, mpt 1 st year	Effectiveness of motor control exercise vs spinal segmental stabilisation exercise in pain and disability in chronic non-specific low back pain patients – a comparative study
3.	S. Thevi priya.s mpt 1 st year	Effectiveness of scapular stabilization exercise vs mckenzie exercise on non-specific neck pain in computer users
4.	Kumudhini, mpt 1 st year	A study to find the effectiveness of cognitive behavioral therapy and reverse kegels exercise for endometriosis among young female adulthoods
5.	Rithika, mpt 1 st year	The combined effects of virtual reality and bimanual therapy on gross motor function and co-ordination for lower extremities in spastic diplegic cerebral palsy child case study
6.	A. Subashini, mpt 1 st year	Correlation between hamstring flexibility and incidence of low back pain in physiotherapy students
7.	S. Srigajalakshmi, mpt 1 st year	Effect of virtual reality programme on frozen shoulder followed by breast augmentation among transgender women
8.	A. Muetha, mpt 1 st year	Effectiveness of neurodynamic techniques and low level laser therapy among carpaltunnel syndrome in reducing pain and improving hand functional ability - a preliminary study
9.	G. Pavithra, mpt 1 st year	Prevalence of work-related musculoskeletal disorder among two-wheeler mechanics in puducherry region
10.	Pratheep m, mpt 1 st year	A comparitive study to find the effectiveness between prone table exercise and rhythmic stabilization exercise in scapular stabilizers for swimmers shoulder
11.	Ajithkumar. A, mpt 2 nd year	Effectiveness of virtual reality and modified constrained-induced movement therapy to improve shoulder function in axillary web syndrome: A pilot study
12.	J. Subapradha, mpt 2 nd year	Effectiveness of clinical pilates and movement strategy training in parkinson's disease: A case study
13.	Srinidhi b.s, bpt final year	Is perimenopause only about hot flashes? Exploring the lesser-known symptoms
14.	Ajithkumar. A, mpt 2 nd year	C-mill
15.	Mohamed ariffsha. M.a, bpt final year	Substance abuse among students: Are you aware of the short-term and long-term effects on health

Original Article

ABSTRACT TITLE: IMPACT OF NEW SENSORY RE-EDUCATION TRAINING ON PERIPHERAL SENSATION AND HAND DEXTERITY AMONG INDIVIDUALS GURUABARNAA. M, MPT 1st YearEUROPATHY

GURUABARNAA. M, MPT 1st Year

BACKGROUND:

The Diabetic Neuropathic Individuals tend to have high risk of getting reduced peripheral sensation and decreased hand dexterity due to long term diabetes. SEMMES WEINSTEIN MONOFILAMENT for sensory impairment and MICHIGAN HAND OUTCOME QUESTIONNAIRE for hand dexterity are the type of outcome measures to assess the conditions.

PURPOSE: To find out the Impact of New Sensory Re-education Training on Peripheral sensation and Hand Dexterity among individuals with Diabetic Neuropathy.

METHOD: The study design was an Experimental study, with 30 Diabetic neuropathy individuals were selected from Global Health care centre, Puducherry. They were allocated into two groups, Group A (n=15) - Experimental group [New Sensory Re-education Training] and Group B (n=15) - Control group [Common sensory re-education technique], with the treatment duration of 4 weeks with each day 30 minutes of treatment duration. The outcome measures MHQ and SWM are measured in pre and post-test for 4-week period.

RESULT: The statistical analysis was done with unpaired 't' test with Group A and B shows Very Significance of (<0.001) for MHQ and Significance of (<0.01) for SMW. Which shows that Group A is more significant than Group B.

CONCLUSION: This study concludes that the New Sensory Re-education training (Group A) shows significant improvement in peripheral sensation (upper limb) and hand dexterity when compared with common sensory re-education technique (Group B).

KEYWORDS: Diabetic Neuropathy, Upper limb sensory impairment, Hand dexterity, New sensory re-education training, Semmes Weinstein Monofilament, Michigan Hand outcome Questionnaire.

Original Article

EFFECTIVENESS OF MOTOR CONTROL EXERCISE VS SPINAL SEGMENTAL STABILISATION EXERCISE IN PAIN AND DISABILITY IN CHRONIC NON-SPECIFIC LOW BACK PAIN PATIENTS - A COMPARATIVE STUDY.

ZAINAB BEGAM. R, MPT 1st Year

Mrs. Dhanalakshmi (MPT-NEURO) Assistant Professor, **Ms. Savitha** (MPT-NEURO) Assistant Professor

BACKGROUND: Chronic Non-Specific Low Back Pain is common in all age groups, and it is the leading cause of disability and lost productivity, with the prevalence over a lifetime of upto 84% for adults. Supervised exercise therapies are among the most commonly advocated treatments for chronic non-specific low back pain.

METHODOLOGY: A sample size of 30 patients was collected by random sampling method from Sri Venkateshwaraa Medical College Hospital and Research Centre, Ariyur, Pondicherry. The participants were randomly assigned to two groups, group A (n=15) Motor control exercise, group B (n=15) Spinal segmental stabilisation exercise. The exercise was performed for 6 weeks. The VAS was used to assess the degree of pain and MODI was used to assess disability.

RESULTS: Statistical analysis was done using paired 't' test for within the group analysis and unpaired 't' test for between the group analysis. Statistical analysis done using unpaired 't' test between group A and group B (0.001) shows that Group B has a better outcome than Group A.

CONCLUSION & IMPLICATION: This study concludes that Spinal segmental stabilisation exercise for group B shows more significant in reducing the pain and disability than Motor control exercise in group A. Future studies can be done concentrating other common conditions related to low back region to find out the effectiveness of this exercise for other conditions. This study helps to obtain an idea about effective exercise for chronic low back pain condition.

KEYWORDS: Motor control exercise, Spinal segmental stabilisation exercise, VAS, MODI, pain, disability

Original Article

EFFECTIVENESS OF SCAPULAR STABILIZATION EXERCISE VS MCKENZIE EXERCISE ON NON-SPECIFIC NECK PAIN IN COMPUTER USERS

S. THEVI PRIYA.S MPT 1ST YEAR, **SRIRAM., BPT, D. MURUGAN, MPT., (ORTHO)** Assistant Professor.

BACKGROUND:

Neck pain is one of the most common musculoskeletal disorders (MSDs) in the world, and it may be debilitating. The cause of nonspecific neck pain is uncertain. Poor posture, anxiety and depression, neck strain, job injuries, or sports injuries cause the majority of non-specific neck pain. Research on non-specific neck pain strategies, such as scapular posture stabilization, sub occipital and sternocleidomastoid release technique is limited. A study is needed to compare the effectiveness of these techniques in computer users.

METHOD: 30 subjects were allocated randomly into 2 groups. The intervention GROUP A received scapular stabilization exercise per session for two sessions a week for 6 week and the GROUP B Mckenzie exercise thrice a week. Both groups were assessed by using outcome measures like NDI & VAS.

RESULTS: Statistical Analysis was done by unpaired 't' test and paired 't' test for the between group and within the group respectively. The mean and SD for VAS in Group A is 2.67 ± 0.49 and Group B 3.13 ± 0.52 The mean and SD of NDI in Group A is 2.47 ± 0.52 and Group B 3.07 ± 0.70 .

CONCLUSION: This study concluded that Group -B which received Mckenzie exercise shows greater statistically significant in reducing pain and improving the functional activity of neck than Group-A (scapular stabilization exercise) by using VAS and neck disability index (NDI) among Nonspecific neck pain patients for treatment duration of 6 weeks.

KEYWORDS: Non-specific neck pain, McKenzie, Scapular stabilization exercise, VAS, NDI

Original Article

A STUDY TO FIND THE EFFECTIVENESS OF COGNITIVE BEHAVIORAL THERAPY AND REVERSE KEGELS EXERCISE FOR ENDOMETRIOSIS AMONG YOUNG FEMALE ADULTHOODS

KUMUDHINI, MPT 1ST YEAR,

Mr. Murugan (MPT-Ortho) Associate Professor, **Mr. S. Ramkumar** (MPT Ortho) Assistant Professor

BACKGROUND:

The young female adulthoods tend to have pelvic pain which is caused due to endometriosis which leads to severe depression, anxiety. Numerical Pain Rating Scale and HOPKINS SYMPTOMS CHECKLIST- 25 are the type of outcome measures to assess the condition.

PURPOSE:

To find out the effectiveness of reverse kegels exercise and cognitive behavioural therapy for endometriosis among young female adults.

METHOD:

The study design was a quasi-experimental study, 20 young adults were selected from Sri Venkateshwaraa group of institution, Karunya gynaecology clinic Puducherry They were divided into two groups, Group-A (n=10) Reverse kegels exercise along with cognitive behavioural therapy. Group-B (n=10) cognitive behaviour therapy, 3 sessions in a week for 4 weeks, the outcome measures was measured in pre and post-test for 4 week period.

RESULT:

Data analysis was done by unpaired 't' test and paired 't' test for the between group and within the group analysis respectively, the statistical analysis done with unpaired 't' test between the group A and group B shows significance ($p < 0.001$). According to mean difference group A showed more effective than group B.

CONCLUSION:

This study concludes that cognitive behaviour therapy along with reverse kegels exercise (Group-A) shows more significant improvement in pain, anxiety and depression reduction than Reverse kegels exercise (Group-B).

KEYWORDS:

Reverse kegels exercise, Cognitive behaviour therapy, progressive muscle relaxation, Numerical pain rating scale and Hopkins symptom checklist-25.

THE COMBINED EFFECTS OF VIRTUAL REALITY AND BIMANUAL THERAPY ON GROSS MOTOR FUNCTION AND CO-ORDINATION FOR LOWER EXTREMITIES IN SPASTIC DIPLEGIC CEREBRAL PALSY CHILD CASE STUDY

RITHIKA, MPT 1ST YEAR, **Mr. I. Mohamed Shafiulla** (MPT- Neuro) Assistant Professor,
Ms. Kirthiga (MPT- Ortho) Assistant Professor

BACKGROUND:

Cerebral palsy has been a broad spectrum of disorder in which spastic diplegic type is one among the commonest type. Diplegic CP can involve upper or lower extremities but this study focuses only on lower extremity. Spasticity will affect both gross motor function and co-ordination in extremities. Emerging studies have reported the positive impact of virtual reality and bimanual therapy in cerebral palsy. The aim of this study is to determine the combined effects of virtual reality and bimanual therapy on gross motor function and co-ordination for lower extremities in spastic diplegic cerebral palsy child.

PURPOSE:

Cerebral palsy child who were fulfilling the selection criteria was included, received combined intervention of both virtual reality and bimanual therapy. Outcome measures used were gross motor function measure, lower extremity functional scale, modified Ashworth scale, lower extremity motor co-ordination test and cerebral palsy quality of life questionnaire. The child was treated with above interventions for about 6 months of time duration, 3 days in a week alternatively in which virtual reality for 30 minutes and bimanual therapy of 30 minutes were given.

RESULT:

Before the treatment, pre-assessment and pre-test data was noted. After the treatment sessions, post-assessment and post-test data was noted. The data obtained in pretest and post-test was compared. Improvement found after the treatment. The combined effect of virtual reality and bimanual therapy showed significant improvement in gross motor function and co-ordination in lower extremities of cerebral palsy child.

CONCLUSION:

Therefore, this study concludes that the combined effect of virtual reality and bimanual therapy showed significant effect in improving gross motor function and coordination for lower extremities in spastic diplegic cerebral palsy.

KEY WORDS: CPQOL questionnaire, MAS, LEMOCOT, LEFS, GMFM (Score-66).

Original Article

CORRELATION BETWEEN HAMSTRING FLEXIBILITY AND INCIDENCE OF LOW BACK PAIN IN PHYSIOTHERAPY STUDENTS.

A. SUBASHINI, MPT 1st Year **Dr. A. ARUN JENKIN**, MPT (ORTHO) Assistant Professor,
Prof. K. ANANDBABU., MPT, PhD Principal SVCOPT

BACKGROUND:

Students nowadays become more sedentary due to mobile phone and other gadgets. Because of their lack of physical activity their muscles become stiff. So, dissecting the issue of hamstring flexibility and to find out the prevalence of low back pain among students are need to our.

OBJECTIVES:-

The current study aimed to observed the difference in hamstring muscle flexibility. The difference between dominant and non-dominant legs and to determine the correlation between Low Back pain and hamstring muscle flexibility.

METHODOLOGY:

One hundred students both male and female with hamstring flexibility of at least 15 degree have been included in this study. Hamstring muscle shortening was examined by the active knee extension test (AKE) and straight leg raising test (SLR), While the low back disability stage was assessed by oswestry disability index (ODI).

RESULTS:

The stright leg rising and the AKE of the right leg were significantly more flexible than the left side. There was a weak positive non- significant correlation between ODI and AKE of the right side ($r = - 0.133$, $p = 0.70$) and the left side ($r = - 0.119$, $p = 0.80$). There was weak negative non-significant correlation between ODI and SLR of the right side. There was a weak positive non-significant correlation between ODI and SLR of the right and left side.

CONCLUSION:-

The result of the current study should negative correlation and not significant relation between LBP and flexibility of hamstring at the level of knee and hip joint.

KEYWORDS:-

Hamstring muscle flexibility, Mechanical low back students, straight leg raising test, active knee extension test.

Original Article

EFFECT OF VIRTUAL REALITY PROGRAMME ON FROZEN SHOULDER FOLLOWED BY BREAST AUGMENTATION AMONG TRANSGENDER WOMEN.

S.SRIGAJALAKSHMI, MPT 1st Year, **Prof. K. ANANDBABU.**, MPT, PhD, Principal SVCOPT

BACKGROUND:

Frozen shoulder is a type of pain and stiffness between the joint. It is painful shoulder syndrome. The build-up of scar tissue restricts movement inside the joint, resulting in pain and severely limiting motion.

OBJECTIVES:-

To study the effectiveness of Virtual Reality Programme and Task Specific Training in frozen shoulder among transgender women and its possible effect in gaining of range of motion ROM and functional activities.

METHODOLOGY:

This was a experimental study. There were two groups of samples each group contained 15 samples were treated with virtual reality programme and task specific training in group -A and task specific training in group B. Samples in both treatment groups were followed till 4 weeks and improvement in range of motion parameter were recorded at every follow up visit of the samples. Range of motion, SPADI, visual analogue scale was used for data entry and analysis.

RESULTS:

In this study, 30 samples were enrolled. Data analysis were done by using a paired and unpaired t test for within the group and between the group .The results of the study shows that Virtual Reality Programme with Task Specific Training Was found effective on frozen shoulder ($p < 0.005$).

CONCLUSION:-

Virtual Reality Programme with Task Specific Training is more effective in treating patients frozen shoulder as compared to Task Specific Training among transgender population in frozen shoulder.

KEYWORDS:-

Shoulder pain and disability index (SPADI), Silicone breast implants (SBI), visual analogue scale (VAS), Range of motion (ROM), Frozen shoulder, Virtual Reality Programme (VR), Task Specific Training

EFFECTIVENESS OF NEURODYNAMIC TECHNIQUES AND LOW LEVEL LASER THERAPY AMONG CARPALTUNNEL SYNDROME IN REDUCING PAIN AND IMPROVING HAND FUNCTIONAL ABILITY - A PRELIMINARY STUDY.

A. MUETHA, MPT 1st Year, **Dr. M. THIYAGARAJAN**, MPT (ORTHO) Assistant Professor, **Mrs. M. MALARVIZHI**, MPT (ORTHO) Assistant professor,

BACKGROUND:

Carpal tunnel syndrome (CTS) is the most common compressive neuropathy of the upper extremity. Carpal tunnel syndrome results from entrapment of the median nerve in the wrist. It is caused by increased pressure on the median nerve between the transverse carpal ligament and the carpal bones. Common symptoms are tingling, numbness, and pain in the hand that may radiate to the forearm or shoulder.

METHODOLOGY:

A total of 10 samples were taken from Aarupadai Veedu Medical College & Hospital, Department of Physiotherapy (OPD), and Puducherry. They were received neurodynamic and low level laser therapy for a period of 3 days a week for 4 weeks. The neurodynamic techniques and low level laser therapy were received carpal tunnel syndrome patients such as Neurodynamic techniques, Median nerve gliding exercise, Wrist flexor stretch, Slider technique passive exercise and Low level laser therapy. They were taught and demonstrated by the researcher and then the subjects were made to do. Prior to the study, the objectives and guidelines were explained to all the participants and written informed consent form and information form were signed by the participants. The pre-tests and post-tests visual analogue scale (VAS) score and Baston carpal tunnel questionnaire (BCTQ) were recorded before and after the intervention of 4 weeks.

RESULTS:

There was significant improvement in neurodynamic techniques and low level laser therapy in carpal tunnel patients. Hence, the study was statistically significant at 5% level of significance. The statistical interpretation of mean and standard deviation shows the improvement in the neurodynamic techniques and low level laser therapy in patients with carpal tunnel patients.

CONCLUSION:-

From the present study, it can be concluded that the neurodynamic techniques and low level laser therapy can be used to reduce the pain and improve functional ability in patients with carpal tunnel syndrome.

KEYWORDS:-

Carpal tunnel syndrome, Neurodynamic techniques, low level laser therapy, median nerve gliding exercise, wrist flexor stretch, slider technique passive exercise, anterior pathway stretch.

Original Article

PREVALENCE OF WORK-RELATED MUSCULOSKELETAL DISORDER AMONG TWO-WHEELER MECHANICS IN PUDUCHERRY REGION

G. PAVITHRA, MPT 1st Year, S. SANTHOSH, MPT (ORTHO)

Background: A motorcycle mechanics focuses on the repair, maintenance, and service of vehicle and other two-wheeled vehicles. Mechanics have high rate of work-related health problem compared to other occupations. Musculoskeletal disorders (MSDs) are pain or discomfort of the muscles, nerves and tendons including other soft tissues. Work related musculoskeletal disorder is increased primarily by work and by the effects of immediate working environment in which it is carried out. Globally, WMDs are frequently implicated as one of the leading causes of worker complaints.

Purpose:

To find out the Prevalence of Work-related Musculoskeletal disorder among Two-wheeler Mechanics in Puducherry.

Study design: Prevalence study

Method: The convenient sampling method was used for the collection of samples based on selection criteria. Using REBA and QEC scoring the outcome measures were noted. Abnormal Posture were assessed using REBA and work place risk factor were assessed using QEC. Further results were concluded through Statistical analysis.

Result: Among 100 members who were responded, 50% of Mechanics are at medium risk level due to abnormal posture according to REBA and 34% of very high-risk level of Back (static), 29% of very high-risk level of Back (moving), 52% of very high-risk level of Shoulder/ arm, 60% of high-risk level of Wrist/ hand, 64% of very high-risk level of Neck according to QEC.

Conclusion: Hence, the study concluded the higher Prevalence of Work-related Musculoskeletal disorder among Two-wheeler Mechanics in Puducherry.

Keywords: Work-related Musculoskeletal disorder, Rapid Entire Body Assessment (REBA), Quick Exposure Check (QEC).

Original Article

10. A COMPARITIVE STUDY TO FIND THE EFFECTIVENESS BETWEEN PRONE TABLE EXERCISE AND RHYTHMIC STABILIZATION EXERCISE IN SCAPULAR STABILIZERS FOR SWIMMERS SHOULDER

PRATHEEP M, MPT 1st Year **Mr. I. Mohamed Shafiulla** (MPT-Neuro) Assistant Professor, **Mrs. Philomina** (MPT-Neuro), Assistant Professor,

BACKGROUND: swimming is a unique activity in which swimmers tend to have swimmers shoulder, also called as shoulder impingement syndrome where they get micro trauma around shoulder muscles due to repetitive activity of shoulder. SPADI and Posterior shoulder endurance test were used as outcome measure to access the condition.

PURPOSE: To compare the effectiveness of prone table exercise and rhythmic stabilization exercise for scapular stabilizers on strength and stability for athletes with swimmers shoulder.

METHOD: The study design was a comparative study, 30 swimmers were selected from Pondicherry swimming centre. They were divided into two groups where Group A (n=15) with prone table exercise. Group B (n=15) with rhythmic stabilization exercises. 3 session in a week for 6 weeks, the outcome measures (SPADI, PSET) were measured in pre and post- test for 6 week period.

RESULT: Data analysis was done by unpaired 't' test and paired 't' test for the between group and within the group analysis respectively, the statistical analysis done with unpaired 't' test between the group A and group B analysis shown significance ($p < 0.001$). According to mean difference group A showed more effective than group B.

CONCLUSION: This study concludes that prone table exercise (Group A) shows more significant improvement when compared to rhythmic stabilization exercise (Group B) in scapular stabilizers for swimmers shoulder.

KEY WORDS: Shoulder impingement, swimmers shoulder, stability, strokes, prone table exercises, rhythmic stabilization exercises.

Original Article

EFFECTIVENESS OF VIRTUAL REALITY AND MODIFIED CONSTRAINED-INDUCED MOVEMENT THERAPY TO IMPROVE SHOULDER FUNCTION IN AXILLARY WEB SYNDROME: A PILOT STUDY

Ajithkumar. A, MPT 2nd Year

AIM AND OBJECTIVE

This study aims to explore the impact of virtual reality and mCIMT on recovery outcomes, including mobility and patient motivation, in Axillary Web Syndrome.

BACKGROUND

Virtual reality (VR) and Modified Constrained Induced Movement Therapy (mCIMT) are helpful treatments for people with Axillary Web Syndrome (AWS), which can happen after breast cancer surgeries. VR creates an engaging and fun environment that encourages patients to participate, while mCIMT focuses on improving movement and strength in the affected arm. Together, these methods aim to make recovery easier and more enjoyable for those with AWS.

NEED OF THE STUDY

The study is needed to explore effective rehabilitation methods for Axillary Web Syndrome, aiming to improve patient engagement and functional recovery outcomes.

METHODS

This pilot study involved six women aged over 40-60 yrs with Axillary Web Syndrome and reduced shoulder function. Participants received VR and mCIMT, with assessments conducted pre- and post-intervention using the Constant-Murley Score and self-assessment questionnaire.

RESULTS

After four- weeks of intervention, significant improvements in shoulder function and mobility among participants. The combination of virtual reality and mCIMT effectively increased patient shoulder function, indicating promising rehabilitation strategies for Axillary Web Syndrome.

CONCLUSION

In conclusion, the combination of VR and mCIMT demonstrates significant potential to improve shoulder function and enhance patient engagement in Axillary Web Syndrome.

CLINICAL IMPLICATIONS

Future studies should investigate the effectiveness of virtual reality and mCIMT on functional independence, long-term recovery, and quality of life.

KEYWORDS

mCIMT, Virtual reality, Axillary web syndrome

Original Article

EFFECTIVENESS OF CLINICAL PILATES AND MOVEMENT STRATEGY TRAINING IN PARKINSON'S DISEASE: A CASE STUDY

J. Subapradha MPT 2nd Year

BACKGROUND: Parkinson's disease (PD) is a progressive neurodegenerative disorder characterized by the degeneration of dopaminergic neurons in the substantia nigra, leading to symptoms such as bradykinesia, tremors, rigidity, and difficulties in performing Activities of Daily Living (ADLs) and Instrumental Activities of Daily Living (IADLs). In 2021, PD affected over 10 million people globally, with a prevalence of 42 cases per 100,000 people in India. Treatment strategies aim to alleviate movement disorders and improve the quality of life. Movement Strategy Training (MST) and clinical Pilates exercises are two interventions that have shown promise in managing PD symptoms.

MST involves techniques like attention, cueing, environmental adaptation, part practice, and mental rehearsal to help individuals cope with movement dysfunctions. Clinical Pilates focuses on strengthening the trunk, improving motor control, and stabilizing the core through exercises targeting abdominal and back muscles, including trunk flexion and extension.

METHODOLOGY: This case study focuses on a 75-year-old male diagnosed with PD for six months, presenting with uncoordinated movements, restlessness, and generalized weakness. He also had a 30-year history of diabetes mellitus and hypertension. Initial assessments showed a Berg Balance Scale score of 8, moderate results on the Timed Up and Go (TUG) test, and a stage 2 score on the Unified Parkinson's Disease Rating Scale (UPDRS). The patient underwent a four-week rehabilitation program that included MST and clinical Pilates exercises.

RESULT: After four weeks, the patient showed significant improvements in standing balance and gait, with a marked reduction in fall risk and improved motor function. These improvements were attributed to the combined effects of MST and clinical Pilates, which addressed his movement and balance impairments.

CONCLUSION : This case study demonstrates the potential benefits of combining MST and clinical Pilates exercises in the rehabilitation of individuals with PD. The results suggest that these interventions can effectively improve balance, gait, and motor control, leading to better management of PD symptoms and enhanced quality of life.

CLINICAL IMPLICATIONS : Further implications suggest integrating MST and clinical Pilates into standard PD rehabilitation programs, potentially enhancing motor function, reducing disability, and improving quality of life, with long-term benefits for patients' independence.

KEYWORDS : Parkinson's disease, clinical pilates, MST

Is Perimenopause Only About Hot Flashes? Exploring the Lesser-Known Symptoms

Srinidhi B.S, BPT Final Year, **Dr. Jeyanthi. S**, Associate Dean-Research,

Background: Menopause marks a significant reproductive milestone in a woman's life, often accompanied by various physical challenges. Perimenopause, the transitional phase before menopause, is characterized by hormonal fluctuations leading to irregular menstrual cycles, with variations of more than seven days or instances of two or more missed cycles. During this phase, middle-aged women experience several biological changes that can affect their overall well-being. Perimenopause brings significant biological challenges, including musculoskeletal pain, fatigue, and sleep disturbances, which impact women's daily lives and well-being. Despite their prevalence, these symptoms are often overlooked, leading to a lack of awareness and proper care. This study aims to highlight the need for targeted medical interventions and lifestyle modifications to help women manage these challenges effectively. Understanding and addressing these issues can improve health outcomes and overall quality of life for perimenopausal women.

Methodology: Study Type: Explorative Study, Study Population: 45- to 55-Year-old Women, Sampling: Convenient Sampling, Study Duration: 3 Month, Sample Size: 25
Study Setting: SVCOPT, community

Results: Findings revealed that musculoskeletal pain was one of the most frequently reported symptoms, affecting daily mobility and physical endurance. Many women experienced joint pain and stiffness, which limited their ability to engage in household chores and other routine activities. Fatigue was another prevalent issue, often leading to a decrease in energy levels and productivity. Sleep disturbances, including difficulty falling asleep and frequent awakenings at night.

Conclusion and Implication: Perimenopause is a critical phase in a woman's life, marked by significant biological challenges that impact daily activities and overall well-being. This study highlights musculoskeletal pain, fatigue, and sleep disturbances as the most common physical symptoms experienced by perimenopausal women. These issues can reduce mobility, energy levels, and productivity, affecting their quality of life. This study has shown the impact of biological problems and warrants immediate attention to initiate coping strategies. Addressing these concerns through medical interventions, lifestyle adjustments, and increased awareness is essential for better health outcomes. Future research should focus on effective management strategies to help women navigate this transition with greater ease and comfort.

Role of Physiotherapy:

Physiotherapists can develop targeted exercise programs to improve joint mobility, reduce stiffness, and enhance muscular strength, thereby addressing musculoskeletal pain. Additionally, fatigue management strategies, including customized physical activity plans and relaxation techniques, can help improve energy levels and overall endurance.

Keywords:

Perimenopause, Biological Symptoms, Musculoskeletal Pain, Fatigue, Sleep Disturbances

Original Article

C-MILL Ajithkumar. A, PG

BACKGROUND

The C-Mill is an advanced treadmill designed specifically for physiotherapy, aimed at assisting patients with gait and balance disorders by simulating real-life walking conditions in a controlled setting. Its innovative features incorporate augmented and virtual reality, providing immersive environments that enhance therapy effectiveness. The C-Mill enables comprehensive assessments of balance and walking ability while facilitating the training of walking patterns through multisensory input. Key functionalities include virtual obstacle-based foot placement training and automated feedback throughout training sessions, which promote engagement and motivation in a safe environment. The C-Mill employs motor learning principles to create a therapeutic experience that is both enjoyable and effective. Its validity in assessing walking adaptability has been confirmed with a 95% confidence interval, establishing it as a reliable tool for clinical use. The clinical workflow is categorized into three main areas: Stand, Step, and Walk, each with specific treatment goals, assessments, and training tailored for patients with balance and walking impairments.

METHODOLOGY

One of the primary assessment tools used with the C-Mill is the C-Gait assessment, which evaluates functional walking performance and adaptability. This assessment lasts approximately 18 minutes and consists of seven distinct tasks: visually guided stepping, tandem walking, obstacle avoidance, slalom walking, reaction to unexpected situations, speed adaptations, and dual-task walking that incorporates auditory cognitive challenges. C-Mill therapy is particularly beneficial in the early phases of rehabilitation, offering intensive, repetitive, and task-specific training that provides immediate feedback on performance. To optimize outcomes, training sessions should be conducted at least twice a week, with a preference for three sessions when feasible. Each session should last a minimum of 20 minutes, although shorter durations may be necessary for patients with lower fitness levels. The total duration of therapy should span a minimum of five weeks, with the specifics of intensity and duration determined collaboratively with the patient.

CONCLUSION

The C-Mill represents a significant advancement in physiotherapy, providing a multifaceted approach to rehabilitation that addresses gait and balance issues effectively. Its blend of cutting-edge technology and evidence-based practices makes it an invaluable resource for helping patients achieve their rehabilitation goals, fostering improved functional mobility and overall quality of life.

CLINICAL IMPLICATION

The C-Mill offers a clinically effective solution for rehabilitation, enhancing gait and balance training through immersive technology and real-time feedback. Its structured approach supports tailored therapy plans, ultimately improving patient outcomes and promoting greater independence in daily activities.

KEYWORDS

C - Mill, Rehabilitation, Treadmill.

Original Article

SUBSTANCE ABUSE AMONG STUDENTS: ARE YOU AWARE OF THE SHORT-TERM AND LONG-TERM EFFECTS ON HEALTH

Mohamed Ariffsha. M.A (UG), **Dr. Jeyanthi. S,** Associate Dean-Research,

BACKGROUND: Substance abuse refers to the harmful use of psychoactive substances, including alcohol, tobacco, illicit drugs, and the misuse of prescription or over-the-counter medications. This can lead to dependence syndrome, which consists of cognitive, behavioral, and psychological symptoms. India has been witnessing a growing trend in substance abuse, particularly among students and young individuals, which significantly impacts their physical, mental, and social well-being.

PURPOSE: The objective of this study is to analyze the prevalence, commonly abused substances, factors influencing substance abuse, and its short- and long-term effects among students and young individuals in India. The study also highlights the role of rehabilitation and physiotherapy in aiding recovery from substance abuse.

METHOD:

The study draws data from various regional reports, surveys, and research studies on substance abuse in India.

The National Survey on Extent and Pattern of Substance Use in India (2018) conducted by the Ministry of Social Justice and Empowerment is referenced for prevalence rates.

Reports and studies focus on substance abuse patterns among different age groups (adolescents and adults) across various regions in India.

Factors influencing substance abuse were examined, including socio-economic conditions, urban-rural differences, and peer influence.

The physiological, psychological, and social effects of drug use were studied, along with the role of rehabilitation and physiotherapy in recovery.

RESULT:

1. Prevalence in Different Regions

Northern India: 75.4% of young people engage in substance use.

College students: 58.3%, school children: 34.93%.

Eastern India: High school students: 12.5%, medical students: 60.26%.

Western India: 70% reported smokeless tobacco use, with socio-economic status affected.

Southern India: College students: 31.8%, high school students: 12.5%.

2. Commonly Used Drugs in India (Adults 18-75 years)

Alcohol: 17.1%, Cannabis: 3.3%, Opioids: 2.1%, Sedatives: 1.21%, Inhalants: 0.58%

Among Adolescents (10-17 years): Alcohol: 1.3%, Cannabis: 0.9%, Opioids: 1.8%

Sedatives: 0.58%, Inhalants: 1.17%

3. Factors Influencing Substance Abuse Among Students

Urban exposure and accessibility & Lower socio-economic status

Peer pressure and social acceptance

Curiosity and experimentation & Family influence

4. Short-Term Effects of Substance Abuse

Physical effects: Increased blood pressure, breathing difficulties, seizures, vomiting.

Psychological effects: Memory blackouts, hallucinations, violent behavior.

Behavioral risks: Impulsivity, unsafe encounters, overdose risk.

5. Long-Term Effects of Substance Abuse

Brain damage: Memory loss, schizophrenia, cognitive decline.

Organ damage: Liver/kidney failure, lung deterioration, skin decay.

Psychological collapse: Depression, social isolation, aggression.

Life-threatening risks: Overdose, heart attacks, strokes.

IMPLICATIONS

1. Awareness Campaigns: Educating students and parents about the dangers of substance abuse.
2. Rehabilitation & Physiotherapy: Providing recovery support through musculo-skeletal rehabilitation, neurological rehabilitation, and cognitive therapy.
3. Government Helplines & Reporting Systems:
 - Drug addiction rehabilitation helpline: 1800-11-0031
 - Drug trafficking reporting helpline: 1933
4. Policy Measures: Strengthening drug control laws, regulating access to substances, and promoting community-based rehabilitation programs. Bottom of Form PAPER, POSTER, INNOVATION WINNERS LIST ON RESEARCH DAY

STUDENTS WINNER LIST			
S.NO	NAME	PAPER / POSTER / INNOVATION	PRIZE
1.	SRIGAJALAKSHMI, PG 1 st YEAR	PAPER	1 ST PRIZE
2.	SRINIDHI, BPT FINAL YEAR	PAPER	2 ND PRIZE
3.	AJITHKUMAR, PG 2 nd YEAR	POSTER	WINNER
4.	KANAGARAJ, PG 2 nd YEAR	INNOVATION	WINNER
5.	AJITHKUMAR, PG 2 nd YEAR	INNOVATION	WINNER
FACULTY WINNER LIST			
1.	DR. PROF. JEYANTHI. S, PRINCIPAL	PAPER	1 ST PRIZE
2.	G. SUBALAKSHMI, ASSISTANT PROFESSOR	PAPER	2 ND PRIZE

S.NO	RESEARCH DAY PRESENTATION-2025
ORAL PRESENTATION (RESEARCH ARTICLES)	
1.	<p>FORMULATION AND EVALUATION OF ORAL DISSOLVING FILM OF PASSIFLORA FOR HORMONE IMBALANCE MANGAEMENT Ramanan. M[*], Hemalatha, D., Darshini. R., Priyadharshini. D. Department of Pharmaceutics, Shri Venkateshwara College of Pharmacy,</p>
2.	<p>FORMULATION DEVELOPMENT OF METOPROLOL SUCCINATE SUSTAINED RELEASE AND TELMISARTAN IMMEDIATE RELEASE BILAYER TABLET Sharan. S^{1*}, Nirmala.E². ¹ Department of Pharmacy, Shri Venkateshwara College of Pharmacy, ² Vice Principal cum Associate Professor Department of Pharmaceutics, S</p>
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Original Article

FORMULATION AND EVALUATION OF ORAL DISSOLVING FILM OF PASSIFLORA FOR HORMONE IMBALANCE MANGAEMENT

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Abstract:

Introduction/Background: Orally dissolving films (ODFs) have recently gained popularity in the pharmaceutical industry due to their convenience and ease of use compared to traditional dosage forms like orally disintegrating tablets. This drug delivery technology, which originated in the confectionery and oral care markets as breath films, has evolved into a widely accepted form for delivering medications. ODFs dissolve quickly in the oral cavity without the need for water, making them particularly useful for patients who have difficulty swallowing pills. The films are typically thin, flexible, and similar in size and shape to postage stamps. This study explores the development of buccal ODFs incorporating Passiflora extract, known for its therapeutic properties, to deliver the drug both systemically and locally through the buccal mucosa.

Experiment/method:

The Passiflora extract was incorporated into the film matrix to create buccal ODFs. The formulation process involved careful consideration of ingredients, preparation methods, and quality control measures to ensure rapid dissolution and effective delivery of the active compounds. The films were evaluated for their dissolution rate, physical properties, and ability to deliver the therapeutic benefits of Passiflora, including regulation of circadian rhythms and treatment of hormonal imbalances.

Result And Discussion:

The formulated ODFs demonstrated rapid dissolution in the oral cavity and the effective release of Passiflora extract. The films showed promise for both systemic and local drug delivery, offering a novel approach to addressing hormonal imbalances and regulating circadian rhythms. The buccal route of administration was found to be effective for this purpose, with the films offering a non-invasive and convenient dosing method.

Conclusion:

Passiflora-based ODFs present a feasible and fast-dissolving drug delivery system, offering a convenient and effective route for herbal extract administration. This technology provides a promising alternative for delivering medications, especially for special populations, with ease and efficiency.

Keywords:

Oral Dissolving Films, Buccal Film, Passiflora, Circadian Rhythm, Hormonal Imbalances.

Original Article**FORMULATION DEVELOPMENT OF METOPROLOL SUCCINATE SUSTAINED RELEASE AND TELMISARTAN IMMEDIATE RELEASE BILAYER TABLET****Sharan S1*, Nirmala. E2**

1 Department of Pharmacy, 2 Vice Principal cum Associate Professor Department of Pharmaceutics,

Objective:

The aim of the current design is to develop the Bilayer sustained release dosage forms of Metoprolol as Sustained release and Telmisartan as Immediate Release. The main objective of this combination therapy is to develop a stable formulation of antihypertensive drugs of angiotensin II receptor antagonist (ARB) as an immediate release and β 1-selective Adrenergic Receptor Blocker (β 1-SARB)) as sustain release bilayer tablet and evaluate their precompression and post-compression parameters.

Materials and Method:

The formulation of the developed work was initiated with direct compression method for telmisartan layer and metoprolol succinate layer. In the formulation of immediate release Micro crystalline cellulose and Croscarmellose sodium (CCS) were used as super disintegrants and was directly compressed. Mannitol was used as diluents. Magnesium stearate used as lubricant.

Results and Discussion:

The study was focused on formulation, development and evaluation of Metoprolol succinate SR and Telmisartan IR bilayered matrix tablet. Preformulation studies were done. Formulation of Metoprolol succinate SR and Telmisartan IR bilayered tablet was prepared as per procedure given in method. The three batches show constant percentage release of drug. Assay were done by HPLC method. The results comply as per specification.

Conclusion:

In view of above fact, the aim of the current design is to develop the bilayer sustained release dosage forms of Metoprolol as Sustained release and Telmisartan as Immediate release. This combination will enhance the bioavailability of metoprolol, dosage regimen reduction and attenuation of drug administration for the effective antihypertensive therapy. The batches taken for formulation passes all the evaluation tests like weight variation, Thickness, Hardness, Friability, dissolution tests and Assay. Based on the results, the formulation were found to be within the limits of the specifications and concluded that bilayer tablet of Telmisartan and Metoprolol Succinate is novel approach to prevent hypertension.

Keywords:

Bilayer tablet, Immediate release, Sustained release, Bioavailability, Invitro release pattern.

Original Article**DEVELOPMENT OF ORODISPERSIBLE TABLET USING LEPIDIUM SATIVUM SEED MUCILAGE AS NATURAL SUPER DISINTEGRANT****Harshine Tirumurugane*., Jeevitha. M.**

Department of Pharmaceutics,

Introduction and Background:

Orodispersible tablets (ODTs) disintegrate instantly on the tongue or buccal mucosa, making them ideal for drugs with low bioavailability and high first-pass metabolism.

Methods: Promethazine HCl, an antiemetic drug, was chosen as the model. The gum was extracted, characterized, and analyzed for drug-excipient compatibility using FT-IR and DSC. ODTs were prepared via direct compression with different concentrations (8, 10, 12, and 15% w/w) of natural (*Lepidium sativum* Linn) and synthetic (Crosscarmellose sodium) superdisintegrants.

Results and Discussion: Pre- and post-compression parameters were evaluated, and stability studies were conducted on optimized formulation F3. The dissolution time and in vitro drug release of F3 were compared with a marketed ODT. Results showed formulation F3 (12% gum) had superior performance, with a 29-second disintegration time and 98.87% cumulative drug release, making it the optimized formulation. This study demonstrates that *Lepidium sativum* Linn seed gum effectively enhances in vitro disintegration time and drug release of Promethazine HCl ODTs.

Conclusion: Compared to synthetic super disintegrants, it offers lower cost, natural origin, fewer side effects, bioacceptability, renewability, and better patient compliance.

Keywords: Promethazine Hydrochloride, *Lepidium Sativum*, Superdisintegrant, Orodispersible Tablet.

Original Article**FORMULATION AND EVALUATION OF MOISTURISING CREAM USING PUMPKIN SEED BUTTER****Sherlin Maggie F1*, Nirmala E2.**

Department of Pharmaceutics,

Introduction and Background: Orodispersible tablets (ODTs) disintegrate instantly on the tongue or buccal mucosa, making them ideal for drugs with low bioavailability and high first-pass metabolism.

Methods: Promethazine HCl, an antiemetic drug, was chosen as the model. The gum was extracted, characterized, and analyzed for drug-exipient compatibility using FT-IR and DSC. ODTs were prepared via direct compression with different concentrations (8, 10, 12, and 15% w/w) of natural (*Lepidium sativum* Linn) and synthetic (Crosscarmellose sodium) superdisintegrants.

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Keywords: Promethazine Hydrochloride, *Lepidium Sativum*, Superdisintegrant, Orodispersible Tablet.

Original Article**DETERMINATION OF METFORMIN HCL & SITAGLIPTIN IN TABLET DOSAGE FORMS BY RP-HPLC METHOD****Deepiga M*, Ganna Anitha.**

Department of Pharmaceutical Chemistry

Introduction and Background: A simple, selective, rapid, and economical method for determining Metformin HCl and Sitagliptin has been developed using Reverse Phase High-Performance Liquid Chromatography (RP-HPLC). This method provides an efficient means for the simultaneous analysis of these drugs, crucial for their combination therapy in diabetes management.

Experiment/Method: The analysis was performed using a C18 column (150*4.6 mm, 5 µm). The mobile phase consisted of potassium dihydrogen ortho phosphate solution, methanol, and acetonitrile in a 40:52:8 ratio at a flow rate of 1 ml/min. The detector wavelength was set at 210 nm. The method was validated following ICH guidelines, with parameters such as specificity, system suitability, linearity, accuracy, precision, ruggedness, and robustness evaluated.

Result and Discussion: The calibration curve was linear with a correlation coefficient (r^2) of 0.999. Metformin HCl and Sitagliptin were separated at retention times of 1.4 and 3.4 minutes, respectively, which are shorter compared to other methods. The mobile phase consumption was lower than in previous methods, indicating increased efficiency.

Conclusion: The proposed RP-HPLC method is simple, precise, and cost-effective, making it suitable for the routine analysis of Metformin HCl and Sitagliptin in pharmaceutical formulations.

Key Words: HPLC, Validation, Metformin HCl, Sitagliptin.

Original Article

DESIGN AND BIO-EVALUATION OF FLAVANONE NUCLEIC-BASED THIAZOLE CONJUGATES AS BROAD-SPECTRUM ANTIMICROBIAL AGENT

Srimathy Raja*, Jayasurya Jayasankar., Sivakumar Kullampalayam Krishnasamy.

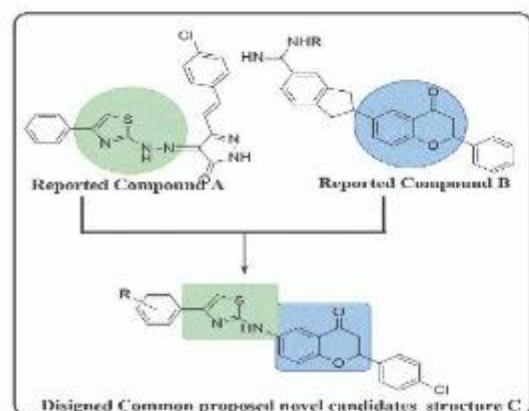
Department of Pharmaceutical Chemistry,

Introduction and Background: The emergence of antimicrobial resistance has intensified the need for novel therapeutic agents. Flavanones and thiazole derivatives have gained significant attention due to their potential antimicrobial properties. This study aimed to design, synthesize, and evaluate a series of 2-substituted flavanones containing 4-substituted phenyl thiazole-2-amine derivatives (8a-d) as potent antimicrobial agents.

Methods: The synthesis of the target compounds involved a four-step process: (1) Preparation of 2-amino thiazole derivatives, (2) Synthesis of chalcones via Claisen-Schmidt condensation, (3) Cyclization of chalcones to form flavanones, and (4) Coupling of the two moieties to obtain the final derivatives (8a-d). The structures of the synthesized compounds were confirmed using IR and proton NMR spectroscopy. In vitro antimicrobial and antifungal activities were assessed using the disc diffusion method against four Gram-positive, four Gram-negative bacterial strains, and four fungal strains. Ciprofloxacin and Clotrimazole were used as reference standards.

Results and Discussion: Among the tested compounds, 8a (100 µg/disc) demonstrated significant antibacterial activity, exhibiting 62% and 61% inhibition against *Staphylococcus aureus* and *Pseudomonas aeruginosa*, respectively, compared to Ciprofloxacin (10 µg/disc). Additionally, compound 8a displayed moderate antifungal activity with a 50% inhibition zone against *Aspergillus fumigatus* compared to Clotrimazole (10 µg/disc). The results suggest that structural modifications may further enhance antimicrobial efficacy.

Conclusion: The findings indicate that compound 8a is a promising antimicrobial candidate. Further structural optimization and mechanistic studies are recommended to enhance its potency and understand its precise mode of action. These results contribute to the ongoing search for effective antimicrobial agents to combat resistant pathogens.



Keywords:

2-Amino Thiazole,
2-Substituted Flavanone,
Antimicrobial and Antifungal.

Original Article

UV SPECTROPHOTOMETRIC METHOD DEVELOPMENT FOR SIMULTANEOUS ESTIMATION OF PARACETAMOL AND FLUPIRTINE BY VIERORDT'S METHOD

A. Anthony Jerome^{1*}, R. Yuvhraj¹, S. Manokaran¹, Ganna Anitha²

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Introduction:

A novel UV spectrophotometric method was developed for the simultaneous estimation of paracetamol and flupirtine in combined pharmaceutical dosage forms using the simultaneous equation method. The absorption maxima were identified at 242 nm for paracetamol and 345 nm for flupirtine. The method involved the use of hydrochloric acid as a common solvent, making it both economical and eco-friendly.

Results and Discussion:

Validation of the method was performed as per ICH guidelines, assessing parameters such as accuracy, precision, linearity, specificity, limit of detection (LOD), limit of quantification (LOQ), ruggedness, and robustness. The method demonstrated good linearity within the concentration range of 1-5 µg/ml for paracetamol and 5-25 µg/ml for flupirtine, with a correlation coefficient indicating strong regression values. Recovery studies showed results within the 98-102% range, and precision values (% RSD) were less than 2%, ensuring high accuracy and reproducibility.

Conclusion:

The developed UV spectrophotometric method is simple, sensitive, robust, and suitable for routine quality control analysis of paracetamol and flupirtine in commercial formulations without requiring derivatization, extraction, or evaporation.

Keywords:

Paracetamol, Flupirtine, UV Spectrophotometry, Simultaneous Estimation, Validation, ICH Guidelines, Analytical Method, Pharmaceutical Analysis, Quality Control.

Original Article

INVESTIGATION OF NEUROPROTECTIVE ACTIVITY OF NELUMBO NUCIFERA IN HUNTINGTON DISEASE THROUGH NETWORK PHARMACOLOGY APPROACH

Lokeshwari. C1*, Sittarthan. V2., Yokeshwaran. A2., Jayaraman. R.3

1. Department of Pharmacy, 2Assistant Professor, Department of Pharmacology, 3.Prof & Head, Department of Pharmacology,

Introduction and Background

Huntington's disease is a devastating neurodegenerative disorder that currently lacks an effective cure. Therapies achieve only a temporary symptomatic relief and a proper treatment for cure is not available. Nelumbo nucifera, commonly utilized in traditional medicine and culinary practices, presents intriguing neuroprotective potential, though the mechanisms underlying its beneficial effects remain largely unexplored. The study aims to elucidate the pharmacological mechanisms of Nelumbo nucifera and its active compounds in mitigating the neurodegeneration associated with Huntington's disease, through a network pharmacology approach.

Material & Methods:

The active phytoconstituent of Nelumbo nucifera was retrieved from the phytochemical-based IMPPAT database. ADME (Absorption, Distribution, Metabolism, and Excretion) analysis was conducted using the SwissADME database. Toxicity profile of selected phytoconstituent were tested by OSIRIS web browser. Targets of the identified compounds were retrieved using SwissTarget-Prediction and Similarity Ensemble Approach. Potential HD-related targets were downloaded from GeneCards and Opentarget platform databases. To assess the connection between HD-related targets and Nelumbo nucifera targets, Venn diagrams were created using bioinformatics tools. Intersection targets were further analyzed using the STRING database to evaluate their interrelationships. Protein-protein interaction (PPI) data were analyzed using the STRING database and visualized using Cytoscape. Gene Ontology (GO) functional enrichment and Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway enrichment analyses of the intersection targets were performed using the DAVID database. A Drug-Target-Pathway network was constructed and visualized using Cytoscape.

Results:

From the IMPPAT database, 274 phytoconstituents were retrieved, with 161 unique. Of these, 20 showed good oral bioavailability (OB > 30%) and drug-likeness (DL > 0.18). Seven crossed the blood-brain barrier (BBB) and were non-toxic: O-Nornuciferine, Nuciferine, Lotusine G, Pronuciferine, Remerin, 4-Methyl-N-Methylcoclaurine, and 5,7-Dimethoxy-2-methyl-1,2,3,4-tetrahydroisoquinoline. We identified 48 target genes from STP and SEA and 1,798 HD-related targets from GeneCards and OTP. Among these, 24 targets overlapped between the 7 BBB-crossing phytoconstituents and HD-related targets. The 24 targets were uploaded to the STING database for PPI analysis, and the hub gene analysis was performed in Cytoscape, where drug-target-pathways were also created and visualized. Conclusion: The findings provide insights into the multi-target therapeutic potential of Nelumbo nucifera and its constituent phytochemicals, offering a promising avenue for developing novel neuroprotective strategies against this debilitating neurodegenerative disorder. This study exploration of Nelumbo nucifera therapeutic mechanisms and its implications for Huntington's disease management.

Keywords: Huntington's disease, Nelumbo nucifera, Network Pharmacology, IMPPAT, Nuciferin.

Original Article

RECENT ADVANCES IN BIOPRINTING TECHNIQUES: APPROACHES, APPLICATIONS AND FUTURE PROSPECTS

Karthigeyan. R1*, Pipenerick. A1., Pavithra. P2., Jayaraman Rajangam.3

1.Shri Venkateshwara College of Pharmacy, 2.Assistant Professor, Department of Pharmacology, 3.Principal, Shri Venkateshwara College of Pharmacy, Puducherry - 605 102

Introduction and Background:

Bioprinting technology has emerged as a powerful tool for building tissue and organ structures in the field of tissue engineering. This technology allows precise placement of cells, biomaterials and biomolecules in spatially predefined locations within confined three-dimensional (3D) structures. Various bioprinting technologies have been developed and utilized for applications in life sciences, ranging from studying cellular mechanisms to constructing tissues and organs for implantation, including heart valve, myocardial tissue, trachea and blood vessels.

Material & Methods:

Jetting-based bioprinting is a non-contact technique in which 2D and 3D structures are generated using picolitre bio-ink droplets layered onto a substrate. This type of bioprinting can be categorized by the mechanism used to generate the bio-ink droplet: thermal method, piezoelectric actuator, laser-induced forward transfer and pneumatic pressure. Extrusion-based bioprinting systems dispense continuous filaments of a material consisting of cells mixed with hydrogel through a micro-nozzle to fabricate 2D or 3D structures. Cell-laden hydrogel can be dispensed by using pneumatic pressure or a syringe pump.

Results:

Bioprinting has the advantage of good resolution of the input cells. Using this technology, great efforts made attempt to print blood vessels, hearts, bone, cartilage, kidneys, skin, nerves and other tissues. 3D printed artificial corneas have been developed by a group of researches in South Korea. Dr.Anthony Atala developed kidney in 2011. Aurinovo researchers in China have reported transplanting 3D printed ears onto children who had birth defects that left their ears. In 2016, Researchers from Northern University successfully implanted bioprinted ovaries in mice.

Conclusion:

Bioprinting technology has gained enormous attention as a fabrication methodology for producing 3D structures. Multiple cells, biomaterials and biological molecules can be printed simultaneously in defined spatial locations, yet many challenges remain for building complex tissues consisting of multiple cell types in a confined microarchitecture. One future scenario of 3D bioprinting could be that no-more organ donors are needed, as personalized human organs can be printed using the patients' own cells or stem cells as a base. This technology can be revolutionizing in preventing and fixing diseases.

Keywords:

Bioprinting Technology, Implantation, Bio-Ink, Biomaterial, Fabrication Methodology

Original Article**OBSERVATIONAL STUDY ON TOLERABILITY WITH CHEMOTHERAPY AMONG BREAST CANCER PATIENT****Priyanka. A1.**

Assistant Professor, Department of Pharmacy Practice

Aims and Objectives:

To observe the tolerability of chemotherapy regimen and to describe toxicity in breast cancer patients.

Methodology:

The study was conducted among breast cancer patients in the Department of Chemotherapy in Dr. Kamakshi Memorial Hospital, Pallikaranai, Chennai. Among 53 female patients 42 were included. On-going treatment in breast cancer patients with all stages of ≥ 4 cycles of chemotherapy was included in this study. Based on the Exclusion criteria, pregnant and lactating women, patients with Tuberculosis, H1N1 and COVID 19 and who are not willing to participate in the study were excluded. Patients who met the inclusion criteria (ie. ≥ 4 cycles) will be followed up to 3 cycles for new complaints, relevant laboratory data, additional drug prescribed, ADE if any. The data was collected using a data collection form and entered into Microsoft Excel and stratified. After getting approval from the ethical committee and the patients meeting the inclusion criteria the following methods will be followed.

Result:

Among the 50 breast cancer patients evaluated for the study, majority of the patients were belonging to the age group of 55 to 64 (44%) followed by 45-54 (18%) and the least number of patients between the age group of 75 above (4%) And 30 (60%) patients had BIRADS IV in the mammogram data and the minimum patients had BIRADS V 15 (30%). Among 42 with breast cancer met the inclusion criteria and receiving chemotherapy. We Noted 30 (71.4) patients tolerability for combination drug paclitaxel and cyclophosphamide, 7 (16) patients on trastuzumab, 3 (7.1) patients on doxorubicin, 2 (4.1) patients in carboplatin. We also observed there is no grade 3 or higher toxicity to chemotherapy including blood, cardiac, GI, fatigue and pain.

Conclusion: Our study concluded that females were more predominantly observed with breast cancer mostly on a age group of 54-64 years and they were mostly under the category at STAGE 3 of breast cancer. Most subjects were given with chemotherapy drug Trastuzumab and most of our study subjects were aware about the breast cancer chemotherapy, remaining were needed to be educated. This also affirms the adherence of chemotherapy via patient data records interaction and education.

Key Words: Breast Cancer, Chemotherapy, Paclitaxel, cyclophosphamide, Trastuzumab, Doxorubicin, Carboplatin.

Original Article

EVALUATION OF AYURVEDIC MEDICINES *Sompriya. R.* Department of Pharmacognosy

Introduction and Background: Ayurveda is a traditional system of medicine with roots in ancient India. The term "Ayurveda" originates from Sanskrit, combining "Ayur" (life) and "Veda" (knowledge). It emphasizes a holistic approach to health, focusing on the balance between the body, sense organs, mind, and soul. Diagnosis in Ayurveda involves observing physical characteristics such as skin, eyes, hair, nails, and tongue. Additionally, it includes assessing doshas (biological energies) and determining imbalances through pulse examination and other traditional methods. Panchakarma, a detoxification therapy, is a crucial treatment in Ayurveda.

Results and Discussion: Ayurvedic medicines are available in various forms, including powders, liquids, solids, and semi-solids. Common formulations include Vatika and Gutika (tablets), Aristas and Asavas (fermented liquids). Standardization and quality control measures are applied to ensure efficacy and safety.

Conclusion: Ayurveda offers a comprehensive, natural approach to maintaining health and treating ailments. Its diagnostic methods and diverse medicinal formulations make it a significant contribution to traditional and complementary healthcare systems.

Keywords: Charak samita, Sushrut samita, Gandhaka vati, Sudarshan churna and Jaggery.

Original Article

OLD DRUGS-NEW TRICKS: AURANOFIN DRUG REPURPOSING

*Nandhini. S*1., Sittarthan. V2., Jayaraman. R.3*

1. Department of Pharmacy, 2. Assistant Professor, Department of Pharmacology,
3. Prof & Head, Department of Pharmacology,

Introduction and Background: Auranofin, a gold-based drug approved by the FDA in 1985 for rheumatoid arthritis, is now gaining attention for its potential to treat diseases like cancer, bacterial infections, and viral infections through drug repurposing. Drug repurposing, also known as drug repositioning, has emerged as a promising avenue, offering a faster and more economical alternative to de novo drug discovery by identifying new therapeutic uses for existing drugs.

Results and Discussion: This approach, which identifies new therapeutic applications for existing drugs, offers a cost-effective and time-efficient alternative to traditional drug discovery. Auranofin mechanism of action involves the inhibition of redox enzymes, leading to oxidative stress and intrinsic apoptosis in cells. Its mechanism of action involves the inhibition of thioredoxin reductase, a crucial enzyme involved in cellular redox regulation. By targeting this enzyme, Auranofin can disrupt cellular redox balance, leading to oxidative stress and cell death, particularly in cancer cells and pathogens. This property has sparked interest in its potential applications for treating various diseases, including cancer, neurodegenerative disorders, HIV/AIDS, parasitic infections, and bacterial infections.

Conclusion: This review provides a comparative analysis of traditional drug discovery and drug repurposing. It also examines the methodologies employed in in silico drug discovery and highlights various repurposed drugs along with their potential applications.

Keywords: Auranofin, Drug Discovery, Drug Repurposing, Cancer.

Original Article

ALZHEIMER'S DISEASE: FROM PATHOPHYSIOLOGY TO THERAPEUTIC ADVANCES

Sabitha. A1., Suhaina A1., Sittarthan. V2., . Jayaraman R.3

1Department of Pharmacy, 2Assistant Professor, Department of Pharmacology,
3Prof & Head, Department of Pharmacology,

Introduction and Background:

Alzheimer's disease (AD) is a progressive neurodegenerative disorder and the most common cause of dementia worldwide. It is characterized by memory loss, cognitive decline, and behavioral changes. The pathophysiology of AD involves the accumulation of amyloid-beta plaques and tau protein tangles in the brain, leading to neuronal damage, synaptic dysfunction, and brain atrophy. These pathological changes disrupt communication between neurons and ultimately result in neuronal death.

The exact etiology of AD remains unclear, but it is believed to involve a combination of genetic, environmental, and lifestyle factors. Key genetic risk factors include mutations in the APP, PSEN1, and PSEN2 genes, as well as the presence of the APOE4 allele. Environmental factors such as age, head trauma, and cardiovascular health also play significant roles. .

Results and Discussion:

Therapeutic approaches for AD have evolved over the years, focusing on both symptomatic relief and disease modification. Current treatments include cholinesterase inhibitors and NMDA receptor antagonists, which aim to improve cognitive function and manage symptoms. However, these therapies do not halt disease progression. Recent advancements in drug discovery have shifted toward targeting the underlying mechanisms of AD.

Promising strategies include the development of monoclonal antibodies against amyloid-beta, tau aggregation inhibitors, and neuroprotective agents. Additionally, research into biomarkers has enhanced early diagnosis and patient stratification, paving the way for personalized medicine. Despite significant progress, challenges remain in translating preclinical findings into effective clinical therapies.

Conclusion:

Continued investment in research and innovation is essential to uncover novel therapeutic targets and improve outcomes for individuals living with Alzheimer's disease.

Key Words:

Alzheimer's disease, Neurodegenerative disorders, Amyloid-beta peptide, Donepezil.

Original Article

SPACE PHARMACOLOGY: ENHANCING ASTRONAUT HEALTH

Hemalatha. G.1, Pavithra. S.1, Sugithra. K.1, Jayaraman. R.2

1. Shri Venkateshwara College of Pharmacy, Puducherry.

2. Principal, Shri Venkateshwara College of Pharmacy, Puducherry.

Background:

Space pharmacology is a specialized field that focuses on understanding how space conditions such as microgravity, radiation, and temperature fluctuations impact the stability, efficacy, and safety of pharmaceutical drugs. As human space exploration progresses, particularly with long-duration missions to the Moon, Mars, and beyond, ensuring the health and well-being of astronauts is critical.

Discussion:

In space, the unique environment can alter the physical and chemical properties of drugs, posing significant challenges for their storage, stability, and administration. Microgravity, for instance, can change how drugs dissolve, absorb, and circulate within the body. Space radiation can degrade drug molecules, compromising their effectiveness. Additionally, extreme temperature fluctuations in space may cause medications to degrade or become ineffective.

Addressing these challenges is paramount for developing viable drug therapies that can be relied upon during space missions. Future directions in space pharmacology focus on overcoming these challenges through innovative technologies such as cryopreservation, transdermal drug delivery systems, and alternative drug formulations. Cryopreservation holds promise for preserving drug stability, while transdermal patches could offer controlled release and easy administration of medications in microgravity.

Conclusion:

Understanding these factors and advancing pharmaceutical technologies will ensure astronauts have access to safe, effective treatments throughout their missions. Ultimately, space pharmacology will play a crucial role in sustaining human health and performance during extended space exploration, paving the way for future interplanetary missions.

Keywords:

Space pharmacology, Microgravity, Drug stability, Radiation, Cryopreservation, Transdermal patches

Original Article

A COMPLETE OVERVIEW OF GALLBLADDER STONE AND PHARMACOLOGICAL TREATMENT

Kirubanithy. A1*, Fahad. K1., Yuvaraj. K1., Sittarthan. V2., Jayaraman. R3

1.Department of Pharmacy, 2.Assistant Professor, Department of Pharmacology,
3.Prof & Head, Department of Pharmacology,

Background:

Gallbladder stones, medically referred to as cholelithiasis, are crystalline concretions that develop in the gallbladder or bile ducts. They primarily arise from imbalances in bile composition, including cholesterol, bile salts, and lecithin, leading to stone formation.

Discussion:

Gallstones are broadly categorized into cholesterol stones, the most common type, and pigment stones, which consist of bilirubin and are often associated with hemolysis or biliary tract infections. The pathogenesis of gallstones involves several steps. A key factor is the super saturation of bile with cholesterol. When cholesterol levels exceed the solubilizing capacity of bile salts, cholesterol precipitates and forms crystals. These crystals are nucleated by mucin glycoproteins, secreted by the gallbladder epithelium. Impaired gallbladder motility further contributes to the problem by causing bile stasis, which allows stones to grow and aggregate over time. Additional factors, such as chronic inflammation of the gallbladder, can alter bile composition and exacerbate stone formation. Gallstone-related disorders encompass a spectrum of conditions. Biliary colic occurs when gallstones intermittently obstruct the cystic or common bile duct, causing intense episodic pain. Acute cholecystitis is an inflammatory condition resulting from prolonged obstruction and bacterial infection. Chronic cholecystitis can arise from repeated episodes of inflammation, leading to fibrosis and impaired gallbladder function. More severe complications include choledocholithiasis (stones in the common bile duct) and gallstone-induced pancreatitis, which necessitate urgent medical intervention. Pharmacological management is generally reserved for patients unsuitable for surgical intervention. Ursodeoxycholic acid is often prescribed to dissolve cholesterol stones by reducing bile cholesterol concentration. Symptom control can be achieved using analgesics, such as NSAIDs, and antispasmodics to alleviate pain. However, cholecystectomy, the surgical removal of the gallbladder, remains the gold standard for treating symptomatic gallstones.

Conclusion:

Early diagnosis and a tailored treatment plan are essential to mitigate complications and optimize patient outcomes.

Keywords:

Gallbladder Stones, Bilirubin, Chronic Cholecystitis, Cholecystectomy.

Original Article

FORMULATION AND EVALUATION OF HERBAL LOTION CONTAINING GARDENIA JASMINOIDES OIL EXTRACT FOR SKIN CARE

Ilakia. E*, Mohana Priya. R., Praveena. S., Kalai Selvam. P.

Department of Pharmacognosy.

Introduction and Background:

The growing consumer demand for natural skincare products has prompted significant interest in herbal ingredients for cosmetic formulations. Herbal extracts are known for their beneficial properties, including moisturizing, anti-inflammatory, and antioxidant effects. This study focuses on formulating and evaluating an herbal lotion using extracts from *Gardenia jasminoides*, cocoa butter, almond oil, glycerin, vitamin E, and aloe vera gel. These ingredients are chosen for their skin-soothing and protective qualities.

Materials and Method:

The herbal lotion was formulated by incorporating *Gardenia jasminoides* oil extract, which contains iridoid glycosides (geniposide), flavonoids (rutin), and terpenoids. These compounds are recognized for their antioxidant, moisturizing, and anti-aging effects. The physical characteristics of the lotion, including pH, homogeneity, appearance, spreadability, and consistency, were assessed. Visual and tactile methods were employed to evaluate homogeneity, while other parameters were measured using standard testing procedures. .

Results and Discussion:

The herbal lotion displayed good spreadability, acceptable consistency, and homogeneity with no signs of phase separation. The pH was within a suitable range for skin applications, and the lotion exhibited a non-greasy texture. The combination of ingredients provided moisturizing and antioxidant effects, making it an effective natural skincare alternative.

Conclusion:

This study successfully developed a herbal lotion with promising properties, offering a safe and natural skincare solution with moisturizing, anti-inflammatory, and antioxidant benefits.

Keywords: *Gardenia jasminoides*, Essential oil, Clevenger, Herbal lotion

Original Article

ROLE OF SYSTEM BIOLOGY IN CANCER TREATMENT

Anthoni Ambrose. A*, Priyadharshan. M.

Department of Pharmacognosy.

Introduction and Background:

Cancer is a complex and heterogeneous disease, influenced by genetic, epigenetic, and environmental factors. Traditional therapies often fail due to the intricate biological networks in tumors, leading to resistance and recurrence. Systems biology, which integrates diverse biological data and computational models, provides a comprehensive framework to understand cancer at the molecular level, facilitating the development of personalized treatment approaches. Treatment Approaches and Technologies: Emerging technologies are significantly enhancing cancer treatment. CRISPR-based gene editing enables precise targeting of cancer-related genes, while next-generation sequencing (NGS) helps identify mutations for tailored therapies. Artificial intelligence (AI) and machine learning are being used to predict patient responses to various treatments, guiding personalized care. These innovations, combined with systems biology, help optimize combination therapies and address challenges like drug resistance.

Results:

Systems biology has advanced cancer research by identifying critical pathways, genetic mutations, and biomarkers for early detection and targeted therapies. It supports the development of predictive models to assess tumor responses, optimizing individualized treatment plans. The integration of systems biology with cutting-edge technologies such as CRISPR, NGS, and AI is accelerating the development of more effective, targeted therapies

Conclusion:

The combination of systems biology and emerging technologies is transforming cancer treatment. By improving our understanding of the molecular mechanisms driving cancer, systems biology enables more personalized therapies, while technologies like CRISPR and AI help optimize treatment strategies. These advancements hold great potential for improving patient outcomes and overcoming the challenges of drug resistance.

Keywords: Cancer, Artificial intelligence, CRISPR.

Original Article**ROLE OF DIGITAL THERAPEUTICS IN MODERN ERA****Mohannad M.A*1., Prasanna T1., Dr.P Aruldoss2., S Kanmani.3**

1.Department of Pharmacy, 2Associate Professor Department of Pharmacy Practice,

3Assistant Professor Department of Pharmaceutical chemistry,

Introduction and Background:

Digital therapeutics (DTx) represent a rapidly emerging field within healthcare, focusing on the use of digital technologies, including mobile apps, software, and wearable devices, to prevent, manage, and treat medical conditions. These therapeutic interventions leverage data-driven approaches to deliver evidence-based treatments that are tailored to individual patients. DTx solutions have shown promising results in managing chronic diseases, mental health conditions, addiction, and lifestyle-related disorders. By utilizing real-time data collection, artificial intelligence, and remote monitoring, DTx platforms offer personalized care, improve patient engagement, and optimize treatment outcomes. The integration of digital therapeutics into the healthcare ecosystem is transforming traditional approaches to medicine by enabling patients to access care in a more convenient, efficient, and scalable manner.

Material & Methods: Mobile Applications: Many DTx interventions are delivered through mobile applications on smartphones and tablets. These apps provide interactive treatment modules, tracking, and reminders. Apps may include cognitive behavioral therapy (CBT) tools, mindfulness exercises, and symptom tracking for conditions like depression, anxiety, and diabetes. Software Systems: Software systems can also be developed for desktop or web use, offering similar services for patients who prefer non-mobile-based interactions. These systems may allow for virtual coaching, self-management, or telehealth consultations. Wearable Devices: Devices such as fitness trackers, heart rate monitors, and glucose monitors collect real-time data on a patient's physiological state. These devices provide continuous monitoring, which can inform personalized therapeutic interventions in conditions such as cardiovascular disease, diabetes, or sleep disorders.

Results: Improved Health Outcomes: Several DTx interventions have demonstrated significant improvements in managing chronic diseases such as diabetes, hypertension, and cardiovascular diseases. For example, digital health interventions for diabetes have led to reductions in HbA1c levels, improved blood glucose control, and better weight management. High Patient Engagement: DTx interventions that are user-friendly, interactive, and personalized have demonstrated high levels of patient engagement.

Conclusion: Digital therapeutics (DTx) are rapidly emerging as a powerful and transformative force in modern healthcare. By leveraging advanced technologies, such as mobile applications, wearables, and data-driven algorithms, DTx provides personalized, evidence-based treatments for a broad spectrum of medical conditions..

Keywords: Digiceuticals, Digital Counseling, Digital Health, Digital Medicine, Digital Technology.

Original Article

NOSE TO BRAIN DRUG DELIVERY: EMERGING TECHNOLOGICAL DEVELOPMENT STATUS ANALYSIS AND THEIR IMPACT ON NEUROLOGICAL DISORDER

Padma Priya L*, Iswarya. M. Department of Pharmacy

Introduction and Background: Nose-to-brain (N2B) drug delivery has emerged as a promising approach for treating neurological disorders such as Alzheimer's disease, Parkinson's disease, and multiple sclerosis. This non-invasive strategy bypasses the blood-brain barrier (BBB) by utilizing the olfactory and trigeminal pathways, enabling direct drug transport to the central nervous system (CNS). Recent advancements in drug carrier molecules, including polymeric nanocarriers, liposomes, and nanocrystals, have demonstrated improved bioavailability, targeted delivery, and reduced systemic side effects.

Results: In this study, the development status and trends of N2B drug delivery technologies were deeply analyzed using literature research, analysis and the Latent Dirichlet Allocation (LDA) model. The findings indicate that intranasal formulations incorporating mucoadhesive polymers and hydrogels enhance drug permeability, stability, and therapeutic efficacy. Various advanced nasal delivery devices have also been explored to optimize drug absorption and retention. Preclinical and clinical studies further support N2B delivery as a breakthrough technology for CNS drug administration, offering superior safety and efficiency compared to conventional oral or injectable formulations.

Conclusion: As research in this field continues, neurological disorder treatments and advance future drug delivery technologies.

Keywords: Nose-to-brain delivery (N2BD), Neurological disorder, Nasal devices, LDA topic model, Polymeric nanocarriers.

Original Article

DIABETIC FOOT ULCER: A REVIEW Vijayabaskaran. V 1*, Kanmani. S2.

1.Department of Pharmacy, 2 Assistant Professor Department of Pharmaceutical Chemistry

Introduction and Background: A common and dangerous side effect of diabetes mellitus, diabetic foot ulcers (DFUs) may result in substantial morbidity, a lower quality of life, and higher medical expenses. Numerous variables, such as neuropathy, poor circulation, and weakened immune function, contribute to the development of these chronic wounds

Discussion: DFUs have a complicated pathophysiology that includes microbial infections, compromised wound healing, and a collapse in skin integrity. Preventing the development of more serious consequences, such limb amputation, requires early detection and effective therapy. This review aims to examine the current understanding of the etiology, risk factors, diagnostic approaches, and therapeutic strategies such as Hyperbaric Oxygen Therapy, Negative Pressure wound therapy (NPWT) which aims to detect the blood flow and nerve functions for managing diabetic foot ulcers

Conclusion: It also includes the strategical report on number of patient infected in a population with different types of DFU.

Keywords: Diabetic Foot Ulcer, Debridement, wound healing, Hyperbaric Oxygen Therapy.

Original Article

CHRONOS TARGETED CELLULAR REGENERATION THERAPY FOR OSTEOARTHRITIS

Iswarya I *, Padma Priya. L. Department of Pharmacy

Introduction and Background:

The development of osteoarthritis (OA) correlates with a rise in the number of senescent cells in joint tissues, and the senescence-associated secretory phenotype (SASP) has been implicated in cartilage degradation and OA. Age-related mitochondrial dysfunction and associated oxidative stress might induce senescence in joint tissue cells. Research in the field has looked at developing therapeutics (namely senolytics and senomorphics) that eliminate or alter senescent cells to stop disease progression and pathogenesis. A better understanding of how senescence contributes to joint dysfunction may enhance the effectiveness of these approaches and provide relief for patients with OA.

Results:

Chronos-Targeted Cellular Regeneration Therapy (CTCRT) is a novel therapeutic approach designed to selectively target and eliminate senescent cells within arthritic joints, while simultaneously promoting tissue regeneration and modulating the inflammatory microenvironment. CTCRT utilizes bioengineered nanoparticles (Chronos Carriers) decorated with targeting ligands to accumulate specifically in OA joints and deliver a therapeutic payload consisting of senolytics, senostatics, growth factors, and anti-inflammatory agents.

In vitro and in vivo studies demonstrate that CTCRT effectively eliminates senescent cells, suppresses the SASP, stimulates cartilage and bone regeneration, reduces inflammation, and improves joint function.

Conclusion:

CTCRT represents a promising disease-modifying strategy for OA.

Key words:

SASP (Senescence Associated Secretory Phenotype), CTCRT (Chronos - Targeted Cellular Regeneration Therapy), Senolytics, Senomorphics.

Original Article

HERBAL FACIAL SERUM: UNVEILING THE SCIENTIFIC INSIGHTS INTO NATURAL INGREDIENTS FOR COSMETICS

Jayasri. S1., Nirmala. E2.

Department of Pharmacy, Vice Principal cum Associate Professor Department of Pharmaceutic

Introduction and Background:

Herbal cosmetics are the preparations used to beautify and enhance the human appearances. Serum has a deep formula with a very high concentration of active substances, a non-oily finish, rapid absorption, and the capacity to penetrate deep layers of the skin. A face serum based on polyherbal extracts, consisting of glycerin, olive oil, and aloe vera gel, provides both instant cosmetic benefits and psychological satisfaction. Its anti-inflammatory, anti-bacterial, and anti-fungal qualities help heal skin disorders like sunburn, small cuts, and bug bites. After examining the serum's physicochemical properties, it was discovered to have a penetration-enhancing effect.

Material and Methods

Face serum made of aloe vera gel, glycerin, and olive oil is a highly concentrated beauty product. This is prepared as O/W emulsion in which oily components are blended with aqueous phase by mechanical vibration at 2500rpm. Serum has a deep formula with a very high concentration of active substances, a non-oily finish, rapid absorption, and the capacity to penetrate deep layers of the skin.

Results and Discussion:

Aloe Vera provides immediate beauty benefits as well as psychological fulfilment. Various skin conditions such as sunburn, minor wounds, insect bites, as well as wound healing can be treated with aloe vera gel. It also has anti-inflammatory, anti-bacterial, and anti-fungal effect. Olive oil is used to moisturize the skin and has anti-inflammatory qualities. Additionally, it possesses antioxidant qualities that help delay premature ageing.

Conclusion:

The physicochemical parameters such as pH, spread ability, viscosity, cyclic temperature test of the facial serum were examined. According to the microbiological testing, stability studies, visual acuity and homogeneity were unaltered. In vitro penetration study reveals that aloe vera and olive oil act as a penetration enhancer.

Keywords: Cosmetics, Aloe Vera gel, Facial serum, penetration enhancers.

Original Article

NOSE TO BRAIN DRUG DELIVERY: EMERGING TECHNOLOGICAL DEVELOPMENT STATUS ANALYSIS AND THEIR IMPACT ON NEUROLOGICAL DISORDER

Padma Priya L*, Iswarya. M.

Department of Pharmacy,

Introduction and Background:

Nose-to-brain (N2B) drug delivery has emerged as a promising approach for treating neurological disorders such as Alzheimer's disease, Parkinson's disease, and multiple sclerosis. This non-invasive strategy bypasses the blood-brain barrier (BBB) by utilizing the olfactory and trigeminal pathways, enabling direct drug transport to the central nervous system (CNS). Recent advancements in drug carrier molecules, including polymeric nanocarriers, liposomes, and nanocrystals, have demonstrated improved bioavailability, targeted delivery, and reduced systemic side effects.

Results:

In this study, the development status and trends of N2B drug delivery technologies were deeply analyzed using literature research, analysis and the Latent Dirichlet Allocation (LDA) model. The findings indicate that intranasal formulations incorporating mucoadhesive polymers and hydrogels enhance drug permeability, stability, and therapeutic efficacy. Various advanced nasal delivery devices have also been explored to optimize drug absorption and retention. Preclinical and clinical studies further support N2B delivery as a breakthrough technology for CNS drug administration, offering superior safety and efficiency compared to conventional oral or injectable formulations.

Conclusion:

As research in this field continues, neurological disorder treatments and advance future drug delivery technologies.

Key words:

Nose-to-brain delivery (N2BD), Neurological disorder, Nasal devices, LDA topic model, Polymeric nanocarriers.

Original Article

NOVEL DRUG DELIVERY SYSTEMS: AN IMPORTANT DIRECTION FOR RESEARCH AND DEVELOPMENT IN NEW DRUG

Manoj. V1., Nirmala. E2

Department of Pharmacy, Vice Principal cum Associate Professor, Department of Pharmaceutic

Introduction:

Novel Drug Delivery Systems: refers to the methods, formulations, technologies, and systems used to safely transport a pharmaceutical chemical into the body and deliver the desired therapeutic effects. The growing demand for improved therapeutic efficacy and fewer side effects in the pharmaceutical arena has ushered in a new era of pharmacy innovation and research.

Discussion:

These methods are intended to overcome the constraints of traditional drug delivery, such as short half-life, insufficient targeting, limited solubility, and bioavailability. The creation of effective and secure drug delivery methods, such as biopharmaceutical formulations, has attracted a lot of attention both domestically and abroad as the fields of pharmacy, materials science, and biomedicine continue to expand and intersect. Some advantages of innovative drug delivery systems include optimal dosing at the proper time and location, efficient use of expensive pharmaceuticals, lower production costs, benefits to patients, and enhanced comfort and standard of living. This article provides an overview of the most recent breakthroughs in drug delivery systems, classified into four basic areas: carrier-based and coupling-based targeted drug delivery systems, intelligent drug delivery systems, and drug delivery devices, based on their core objectives and methodology.

Conclusion: It also critically examines the present research obstacles, technological impediments, and upcoming developments in the application of novel drug delivery systems.

Keywords: Novel Drug Delivery System, Targeted Drug Delivery System, Nanocarriers, Nanotechnology, Biomedicine.

Original Article

A REVIEW: MULTIPLE SCLEROSIS

Denesh. V1*, Vishvam. A1., Sittarthan. V2., & Jayaraman. R.3

1.Department of Pharmacy, 2.Assistant Professor, Department of Pharmacology,
3.Prof & Head, Department of Pharmacology,

Introduction:

Multiple sclerosis (MS) is a chronic autoimmune disorder affecting the central nervous system (CNS), including the brain, spinal cord, and optic nerves. It occurs when the immune system mistakenly attacks the protective myelin sheath surrounding nerve fibers, leading to inflammation, demyelination, and eventual nerve damage. This disruption impairs the transmission of electrical signals within the CNS, resulting in a wide range of symptoms. The clinical presentation of MS varies significantly among individuals, with common symptoms including fatigue, vision problems, muscle weakness, coordination difficulties, and cognitive impairment.

Discussion:

MS is typically categorized into different types: relapsing-remitting MS (RRMS), secondary progressive MS (SPMS), primary progressive MS (PPMS), and clinically isolated syndrome (CIS). RRMS is the most prevalent form, characterized by episodes of symptom exacerbation followed by periods of remission.

The exact cause of MS remains unknown, but it is believed to result from a combination of genetic predisposition and environmental factors, such as low vitamin D levels, smoking, and viral infections. Women are more frequently affected than men, and the disease often manifests between the ages of 20 and 40. Although there is no cure for MS, advancements in medical research have led to the development of disease-modifying therapies (DMTs) that can reduce the frequency of relapses, slow disease progression, and improve quality of life.

Conclusion:

Early diagnosis and a multidisciplinary approach to treatment are crucial in managing the condition effectively and supporting individuals living with MS.

Keywords:

Multiple sclerosis, Central nervous system, Disease modifying therapies.

Original Article

DIETARY FLAVONOIDS AND THEIR IMPACT ON MS PROGRESSION: A REVIEW

Boopathi. G1*, Aravindhan. R1., Sittarthan V2., Jayaraman. R.

1.Department of Pharmacy, 2.Assistant Professor, Department of Pharmacology,
3.Prof & Head, Department of Pharmacology.

Introduction:

Flavonoids, a diverse group of plant-derived polyphenolic compounds, have garnered attention for their potential therapeutic benefits in neurodegenerative diseases, including multiple sclerosis (MS). MS is a chronic autoimmune disorder characterized by inflammation, demyelination, and neurodegeneration in the central nervous system. Flavonoids exhibit a range of biological activities, such as antioxidant, anti-inflammatory, and immunomodulatory effects, which may be beneficial in mitigating the pathological processes of MS.

Discussion:

Research suggests that flavonoids can reduce oxidative stress by scavenging free radicals and inhibiting lipid peroxidation, thereby protecting neuronal cells from damage. Their anti-inflammatory properties involve the modulation of pro-inflammatory cytokines and the suppression of microglial activation, which are key contributors to MS progression. Additionally, flavonoids may enhance remyelination and support neuroprotection by promoting the survival and differentiation of oligodendrocyte precursor cells. Dietary sources of flavonoids, such as fruits, vegetables, tea, and cocoa, have been associated with improved outcomes in MS patients. Specific flavonoids, including anthocyanin groups, have shown promise in preclinical studies for their ability to modulate immune responses and reduce disease severity. While the therapeutic potential of flavonoids in MS is promising, further clinical research is needed to establish their efficacy, optimal dosage, and long-term safety.

Conclusion:

Integrating flavonoid-rich diets or supplements into MS management strategies could offer a complementary approach to existing treatments, enhancing the quality of life for individuals living with this condition.

Keywords:

Multiple sclerosis, Flavonoid, Anthocyanin, Oxidative stress.

Original Article

UNDERSTANDING AND MANAGEMNET OF MENSTRUAL CYCLE

Kanimozhi S*1, Aartheeswari S*2, Sittarthan V3 & Jayaraman R4

Department of Pharmacy, Assistant Professor, Department of Pharmacology,
Prof & Head, Department of Pharmacology,

Introduction:

Menstrual cycle disorders encompass a range of conditions that disrupt the normal menstrual cycle, affecting physical and emotional well-being. These disorders are broadly classified into several types, including amenorrhea (absence of menstruation), dysmenorrhea (painful periods), menorrhagia (heavy menstrual bleeding), oligomenorrhea (infrequent periods), and premenstrual syndrome (PMS). Each type presents distinct symptoms, such as severe cramps, irregular bleeding, mood swings, or prolonged bleeding.

Discussion:

The causes of these disorders vary and may include hormonal imbalances, structural abnormalities, or underlying medical conditions like polycystic ovary syndrome (PCOS) or thyroid dysfunction. Symptoms often interfere with daily life, ranging from mild discomfort to debilitating pain and emotional distress. Pharmacological treatments are tailored to the specific disorder and its severity. Common approaches include hormonal therapies like oral contraceptives to regulate cycles, nonsteroidal anti-inflammatory drugs (NSAIDs) for pain relief, and selective serotonin reuptake inhibitors (SSRIs) for severe PMS or premenstrual dysphoric disorder (PMDD). In some cases, surgical interventions may be necessary for structural abnormalities. Early diagnosis and personalized treatment plans are crucial for managing symptoms and improving quality of life. Regular medical consultations and lifestyle modifications, such as stress management and a balanced diet, can also play a supportive role in treatment.

Conclusion:

A comprehensive understanding of these disorders necessitates a multifaceted approach, encompassing epidemiology, etiology, pathophysiology, clinical presentation, diagnostic modalities, and therapeutic interventions.

Keywords:

Menstrual disorder, Premenstrual syndrome, Amenorrhea, Menorrhagia



Research Day
2025 Awards

"BEST RESEARCHER AWARD OF SVGI" 2025

Awarded to

Dr. J. VARSHA MURTHY



Professor & Head of the Department of Prosthodontics

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Citations;413

Research Awards

2024 "Excellence in Dental Research" award at the 34th Annual Conference by Indian Society for Dental Research at Rajas Dental College, Kanyakumari-- National Level- By Indian Society of Dental Research- (International Association for Dental, Oral and Craniofacial Research- India Division

2022 : National Level: First prize in Faculty paper presentation session at the 50th Golden Jubilee

Indian Prosthodontic Society National conference 2022, New Delhi

2021: National Level: Global outreach dental Diva award 2021 for excellence in Prosthodontics

2020: National Level : Best in session prize in Faculty paper presentation at the 48th Indian Prosthodontic Society National Virtual conference 2020, Nagpur

SVMCH&RC AWARDS FOR RESEARCH 2023-2024

S. NO	Name and Designation of the awardee	Name of the award	Awarding Authority	Year
1	Dr. Surya Ranjani PG, Psychiatry	Pro. Dr Balan Best Paper Research award	TANPSYCON 2023 Chengalpaat Medical college	2023
2	Dr. Manek Markose	First prize for Paper Presentation	PONSICON, SVMCH&RC	2024
3	Dr. Josette Caroline Martin, PG Pathology	2nd prize in oral paper presentation in Pearls of Hematology	ACS Medical College and Hospital, Chennai	2024
5	Dr. Ganesh Kumar PG, Community Medicine	1st prize in Oral (Paper) Presentation	PREVENCON25 Puducherry	2025
7	Prof. Dr. S. Mahadevan Professor , Paediatrics	Life Time Achievement award	Dr. K. C Chaudhuri Foundation & Indian Journal of Pediatrics, New Delhi	2024
8	Prof. Latha.R Professor , Physiology	Outstanding Scientist in Scientific Research and Higher Education	Dr. B. Vasatha Raj Foundation, Chennai	2024
9	Prof. Papa Dasari Dean Research & PG Academics	"Research Excellence Award"	Institute of Researchers , Govt of India, Waynad, Kerala,	2024
		"Pioneer Researcher Award"	Medical Research Summit and Blackbuck Awards, Medical Dialogues, New Delhi	2024

- ◆ **Dr. Raghuchandra**, 1 year PG of General Medicine won the title of **MR.**

PONDICHERRY-2024 on 19.11.2024

SVDC-AWARDS FOR RESEARCH 2023-2024

S. No	Name and Designation of the awardee	Name of the Award	Awarding Authority	Year
1	DR. B. NITIN Postgraduate – Oral and Maxillofacial Surgery	Poster – Third prize	IDA-Oral Cancer symposium	2023
2	DR. B. LOGESHWARAN Postgraduate - Oral and Maxillofacial Surgery	Poster – Third prize	IDA-Oral Cancer symposium	2023
3	Dr. Kathijatahul Hidayah S Orthodontics	Best Dissertation	Indian Orthodontic Conference - Meerut	2023
4	Dr. Piradhiba Orthodontics	Best Paper Presentation	Indian Orthodontic Conference - Meerut	2023
5	Dr. Kavitha Arumugam Oral & Maxillofacial surgery	Best Presentation	16 th Asian Congress of Oral & Maxillofacial surgery	2024
6	Dr. Varsha Murthy J Prosthodontics	Excellence in Dental Research	Rajas Dental College, Kanyakumari	
7	Dr. Sri Vidhya Marimuthu Periodontology	Best Paper	75 th Indian Dental Conference, Chennai	2025
8	Dr. M. Keerthana Rao Oral & Maxillofacial surgery	Best Paper	75 th Indian Dental Conference, Chennai	2025
9	Dr. Rubini Postgraduate - Pedodontics	Paper Presentation – 2 nd Prize	75 th Indian Dental Conference, Chennai	2025
10	Dr. Akansha Postgraduate - Prosthodontics	Paper Presentation – 1 st Prize	75 th Indian Dental Conference, Chennai	2025
11	Dr. Kaviya Postgraduate - Periodontology	Paper Presentation – 2 nd Prize	75 th Indian Dental Conference, Chennai	2025
12	Dr. Amuthan, S Prosthodontics	Best Case Presentation	TATA Memorial Hospital Association of Dental and Prosthetic Oncology, MFPONCO 2025	2025

SVCPMS - AWARDS FOR RESEARCH 2023-2024

RESEARCH AWARDS

1. Best Researcher Award 2021-IASP'21, organized by VD Good Publications.
2. Award of Excellence - for outstanding and excellent services in identifying research potential and laboratory skills among students of SVCPMS, awarded by the management of Sri Venkateshwaraa Group of Institutions on the occasion of Research Day on 28.10.2022

ICON - AWARDS FOR RESEARCH 2023-2024

S.NO	NAME OF THE AWARD	NAME OF AWARDEE	NAME OF THE COLLEGE	AWARDING AUTHORITY	YEAR OF AWARD
1	Best paper presentation	Ms. Gunasakthi. G	IGMC- Code Savers Conference	IGMC	2024

SVCP - AWARDS FOR RESEARCH 2023-2024

ORAL PRESENTATION AWARDS

S.No	Name of the Award	Name of Awardee	Name of the College	Awarding Authority	Year of Award
1	Second position in Oral Presentation	DR. JAYARAM RAJANGAM	Principal, Sri Venkateshwara College of Pharmacy	International Conference on BioStart: Bridging Innovative Research & Startups in Pharmaceuticals" on 28 th April- 2024 at an event organized by S.D. College of Pharmacy, Muzaffarnagar, U.P	28 th April- 2024
2	Best Oral Presentation	Ms. R. HARINI	Assistant Professor, Sri Venkateshwara College of Pharmacy	the Society of Young Biomedical Scientists, India Fifth Science Conclave-cum-National Biomedical Research Competition, organized by AIIMS, Delhi	3 rd December - 2024

PROFESSIONAL AWARDS

3	Bharat Shiksha Gaurav Puraskar (For Outstanding Achievements and Remarkable Contribution in the Field of Pharmaceutical Education)	DR.K.K.SIVAKUMAR	Professor, Sri Venkateshwara College of Pharmacy	KTK Outstanding Achievers and Education Foundation, New Delhi	22 nd December 2024
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SVCOPT-AWARDS FOR RESEARCH 2023-2024

S. No	Name of the Award	Name of Awardee	Name of the College	Awarding Authority	Year of Award
1	YOUNG RESEARCHER AWARD	PROF. M. PAULRAJ	SVCOPT	AT INTERNATIONAL CONFERENCE WAS ORGANIZED BY RL JALAPPA COLLEGE OF PHYSIOTHERAPY AT KOLAR, KARNATAKA,	2025

Student Award Achievement

S.No	Date	Name	Title	Organized By
1.	22th February 2024	Mr. S. Rajaganapathi	“Health Club” Secured 2 nd Place	IIC, SVGI
2.	10 & 11 October 2024	Mr. S. Rajaganapathi	“RENEWA” Start-up Funding got 5 Lakhs	TECHVAGANZA 2024, Greenovator Incubator Foundation (GIF) and IIEDC, NIT Srinagar.

Faculty Paper Presentation 2023 - 2025

27th February, 2025	SVNOG PHYSIO CON – 2025	Professor Dr. S. Jeyanthi got First Prize in Paper Presentation
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Student Award Achievement

Sl. No.	Date	Paper/Poster/Innovation	Organized by	Achievement
1.	29/06/2023	Neuro Phy X – 23	Mahatma Gandhi Medical College and Research Institute, Puducherry	Paper Presentation UG – Ms. Nandhini D – 1 st Prize PG – Ms. Vasanthara – 1 st Prize
2.	3rd August 2024	MEACON 2K24 Innovation Competition	Velammal Engineering College, Chennai	Mr. S. Rajaganapathi Final Year BPT from Sri Venkateswara College Of Physiotherapy, Ariyur. He has secured the First Prize in the event “Ideophilia”.
3.	September 6, 2024:	World Physiotherapy Day	School of Physiotherapy at Sri Balaji Vidyapeeth	Ms. K. Nandhini, PG student Secured 1 st Prize in Paper Presentation.
4.	7 & 8 September, 2024	Flair 24	SVCOPT	Mohamed Ariffsha, Yashwant, Srinidhi, Vijay, Karthikeyan guided by Dr. Jeyanthi. S received second position in Innovation Competition with topic “Vertilcap Pro”
5.	27th February, 2025	SVNOG PHYSIO CON – 2025	Sri Venkateshwara University College of Physiotherapy, Chennai	First prize- Subapradha from 2nd Year Neuro
6.	March 7th and 8th, 2025	International Conference	RL Jalappa College of Physiotherapy, Kolar, Karnataka.	Mrs. Lakshna G.B from the PG category was awarded the first prize for her outstanding paper presentation, Prof. M. Paulraj, Ms. Lakshna G.B., and Ms. Santhiya P. clinched the first prize , for innovation competition.



***Research
Output
2024 -2025***

Original title

COMPARATIVE STUDY BETWEEN INTRATHECAL 0.5% LEVOBUPIVACAINE WITH DEXMEDETOMIDINE AND INTRATHEAL 0.5% BUPIVACAINE WITH DEXMEDETOMIDINE IN ELECTIVE INFRAUMBILICAL SURGERIES

Chowndharryaa, Chinthavali Sujatha, Suganya., Department of Anaesthesia,

BACKGROUND:

The most commonly performed anaesthetic technique for infraumbilical surgeries is spinal anaesthesia. It is safe, reliable and an inexpensive technique. It negates the side effects associated with general anaesthesia. Levobupivacaine preferred for its lesser cardiotoxicity, better safety profile and offers a considerably longer sensory blockade and motor blockade duration than bupivacaine. Dexmedetomidine, highly selective alpha2 adrenoreceptor added as adjuvants to local anaesthetics enhances the block properties of local anaesthetics and also provides sedative and analgesic and prolongs the anesthesia duration and reduces requirements of rescue analgesia.

OBJECTIVES:

The study aim is to evaluate the efficacy between intrathecal levobupivacaine with dexmedetomidine and intrathecal bupivacaine with dexmedetomidine in infraumbilical surgeries.

MATERIAL AND METHODS:

A randomized, double-blinded, prospective study on 60 patients of ASA I and II undergoing infraumbilical surgeries under spinal anaesthesia. Patients were randomly allocated to one of the two groups as GROUP A (n= 30) and GROUP B (n=30). Each group received 3.5 ml of 0.5% levobupivacaine with dexmedetomidine (GROUP A) or 3.5 ml of 0.5% bupivacaine with dexmedetomidine (GROUP B). Characteristics of sensory and motor blocks, haemodynamic changes, duration of analgesia, adverse effects, visual analogue score (VAS) and analgesic requirement were studied at different time intervals.

RESULTS:

In this comparative study between 0.5% levobupivacaine with 5 micrograms dexmedetomidine and 0.5% bupivacaine with 5 micrograms dexmedetomidine in subarachnoid blockade. Group A patients had longer duration of sensory and motor block when compared with Group B patients. Onset of sensory and motor blockade is earlier in group B. Duration of analgesia is longer in group A with significant reduction in VAS score at 6th and 12th hour respectively. The number of rescue analgesia required in group A is less when compared to group B.

CONCLUSION:

Our study results showed that, levobupivacaine with dexmedetomidine provides more effective anaesthesia in term of onset, duration of sensory and motor block along with longer period of post operative analgesia with lesser side effects, better patient's and surgeon's satisfaction in comparison to bupivacaine with dexmedetomidine.

Original title

CORRELATION OF SYMPHYSIOFUNDAL HEIGHT AND ABDOMINAL GIRTH WITH THE INCIDENCE OF HYPOTENSION IN CAESAREAN SECTION UNDER SPINAL ANAESTHESIA USING 0.5% HYPERBARIC BUPIVACAINE

Amala Cynthia Empress*, **Krishna Prabu ***, **Samson David ****, Department of Anesthesiology,

INTRODUCTION :

Spinal anaesthesia is the most preferred method for caesarean section. One of the common complications of spinal anaesthesia is hypotension with an incidence of 70-80% which may lead to adverse fetal and maternal outcomes. So, various maternal and fetal predictors have been used to anticipate the occurrence of hypotension after spinal anaesthesia. In our study, we correlate the incidence of hypotension with symphysiofundal height and abdominal girth.

AIMS AND OBJECTIVES :

This study aims to correlate the symphysiofundal height and abdominal girth with the incidence of hypotension in caesarean section after spinal anaesthesia using 0.5% Hyperbaric Bupivacaine. The primary objective is to study the effect of symphysiofundal height and abdominal girth on the incidence of hypotension and secondary objective is to study the effect of abdominal girth on the spread of local anaesthetic drug.

MATERIALS AND METHODS :

An observational study was carried after clearance from ethical committee. Based on the inclusion and exclusion criteria, 85 parturients were selected between age group of 18-35 years who come under ASA II scheduled for elective caesarean section under spinal anaesthesia at the Department of Anaesthesiology, Sri Venkateshwarra Medical College Hospital & Research Centre, Puducherry from September 2022 to February 2024. Preoperative assessment was done and the symphysiofundal height and abdominal girth was measured. On the day of surgery, parturients were shifted and monitors were connected (Heart rate, oxygen saturation and non invasive blood pressure). The parturients underwent caesarean section under spinal anaesthesia using 2 ml of 0.5% Hyperbaric Bupivacaine. Systolic, diastolic, mean arterial blood pressure and level of sensory blockade were measured at regular intervals throughout the procedure. The data was tabulated and analysed. The chi-square test was used to determine the relationship between categorical variables. P-value < 0.05 is regarded as indicating an association between the variables.

RESULTS AND DISCUSSION :

The incidence of hypotension was higher in parturients with higher abdominal girth (>105 cm) which was about 22% compared to that of smaller abdominal girth group (<105 cm) who had 12% occurrence of hypotension and the comparison was found to have a p value of 0.002 which was statistically significant. The comparison of symphysiofundal height with the incidence of hypotension was not found to be statistically significant with p value of 0.199. The study also showed that parturients with large abdominal girth (>105 cm) attained higher level of sensory blockade earlier than the pregnant women with small abdominal girth (<105 cm) which was found to be statistically significant with P value of 0.0001.

CONCLUSION:

In term parturients who are undergoing caesarean section under spinal anaesthesia using 0.5% hyperbaric bupivacaine, abdominal girth can be used as a preoperative predictor for the incidence of hypotension and level of sensory blockade as it has shown significant positive correlation.

Original title**COMPARISON OF ISOBARIC AND HYPERBARIC ROPIVACAINE IN SPINAL ANAESTHESIA IN LOWER LIMB SURGERIES-A RANDOMISED CONTROLLED TRIAL****Ragu ram., Radhakrishnan., Samson david,** Department of Anesthesiology**BACKGROUND:**

The first significant regional method used in clinical practice was spinal anaesthesia. Using a variety of local anaesthetic drugs, it is a safe, dependable, and cost-effective approach that has the benefit of delivering surgical anaesthesia and extended post-operative pain management. Spinal anaesthesia reduces autonomic, somatic, endogenous, and intraoperative pain. It offers an efficient sensory and motor blockage with a quicker onset. This study aims to compare the onset and duration between isobaric and hyperbaric Ropivacaine given intrathecally in lower limb surgeries.

MATERIALS AND METHODS:

A randomized, double-blinded, prospective study on 70 patients of ASA I and II undergoing lower limb surgery was done. GROUP A received 3.5 millilitres of isobaric 0.75% Ropivacaine, while those in GROUP B received 3.5 millilitres of hyperbaric 0.75% ropivacaine. Characteristics of sensory and motor blocks, haemodynamic changes, duration and quality of analgesia, visual analogue score (VAS) were studied at different time intervals.

RESULT:

Group B patients had onset of sensory block in 6.7 ± 1.5 mins and motor block in 8.6 ± 1.4 mins when compared with Group A patients onset of sensory block was in 7.2 ± 1.7 mins and motor block in 9.3 ± 1.6 mins. Duration of sensory block is longer in Group B 191.52 ± 26.3 mins than Group A is 148.29 ± 23.4 mins. Duration of motor block was found to be longer in Group B 182.14 ± 55.5 mins when compared with Group A 123.94 ± 4.3 mins which is highly statistical significant. VAS at 5 hours had significant P value (<0.005) and mean duration of analgesia was significantly prolonged in Group B. The haemodynamic parameters were statistically significant difference on Group B comparing with Group A.

CONCLUSION:

The findings of our study demonstrated that hyperbaric Ropivacaine and isobaric Ropivacaine may both provide sufficient motor and sensory blockade and be applied to lower limb surgeries. Compared to isobaric Ropivacaine, hyperbaric Ropivacaine produces anaesthesia more effectively in terms of the onset, length, and duration of sensory and motor block, as well as a longer period of post-operative analgesia with fewer side effects and higher satisfaction from patients and surgeons.

Original title

Opioid-free versus opioid-based anaesthesia for elective laparoscopic surgery – A double blinded randomized controlled trial

Ramyadevi, Jayashri Devi, Chinthavali Sujatha, Department of Anesthesiology

BACKGROUND:

Patients undergoing laparoscopic surgery often experience moderate to severe postoperative pain. Opioid based anaesthesia can result in respiratory depression, sedation, postoperative nausea, vomiting and other side effects. In opioid free anaesthesia, a multimodal anaesthetic approach is being studied as a means of avoiding opioids throughout the perioperative and postoperative period. In this study we analysed the efficacy of opioid-free and opioid-based anaesthesia in terms of intraoperative hemodynamic stability and post operative analgesia requirement in patients undergoing elective laparoscopic surgery under general anaesthesia.

MATERIALS AND METHODS:

A randomized, double-blinded, prospective study on 60 patients aged 18–60 years of ASA I and II undergoing laparoscopic surgery under general anaesthesia. Patients were randomly allocated to one of the two groups as GROUP A(n=30) and GROUP B(n=30). GROUP A received opioid free anaesthesia with dexmedetomidine, ketamine, paracetamol and magnesium sulphate and GROUP B received opioid based anaesthesia with fentanyl and morphine. Intraoperative HR, SBP, DBP, MAP, SPO2 and postoperative duration and quality of analgesia and adverse effects were studied at different time intervals.

RESULT:

Both opioid-free and opioid-based group could maintain perioperative haemodynamic stability. Group A had a significant lower mean VAS score (0.725 ± 0.052) compared to Group B (1.138 ± 0.052). Mean duration of rescue analgesia in Group A was 920 min and in Group B was 428 min which was statistically significant (p value <0.001).

CONCLUSION:

The study demonstrated that both opioid-free and opioid-based anaesthesia could maintain intraoperative hemodynamic stability and of a exhibited a lower VAS score, longer analgesic duration and required lesser rescue analgesia in the first 24 hours postoperatively without PONV in patients undergoing laparoscopic surgery under general anaesthesia.

Original title

COMPARING THE EFFICACY OF HYPERBARIC ROPIVACAINE AND HYPERBARIC LEVOBUPIVACAINE FOR ELECTIVE SURGERIES UNDER SPINAL ANESTHESIA - A RANDOMISED CONTROLLED TRIAL

Palepu Gowthami., Jayashri devi., Suganya, Department of Anesthesiology

INTRODUCTION :

The development of spinal anaesthesia, which started with August Bier's seminal work in 1899, is a watershed moment in medical history¹. Spinal anaesthesia is now more effective and safer than ever before because of newly developed local anaesthetics that have a longer half-life and less toxicity. Spinal anaesthesia is becoming more appealing for a range of surgeries due to recent improvements that provide long-lasting pain relief after surgery without major adverse effects. Combining spinal anaesthesia with other regional techniques, such as nerve blocks, improves the results of pain control. More thorough analgesia can be achieved using this method, which is especially important for complicated surgeries when postoperative pain management is paramount.

AIM AND OBJECTIVES :

AIM To compare the efficacy of Hyperbaric Ropivacaine and Hyperbaric Levobupivacaine in elective surgeries under spinal anaesthesia.

Primary objective: "To compare the onset and duration of sensory blockade and motor blockade between the groups.

MATERIALS AND METHODS :

This randomised, prospective, double-blinded trial was undertaken at Sri Venkateshwaraa Medical College Hospital & Research Centre in Ariyur between 2022- 2024. This study aimed to assess the efficacy of spinal anaesthesia in elective procedures in patients aged 18-60yrs, both genders, and ASA physical status I & II. Criteria's that precluded patient participation were local infection at injection site, patient refusal, coagulopathies, psychiatric disease or antipsychotic medication use, pregnancy, local anaesthetic allergy, and conversion to general anaesthesia during the surgery. Based on the primary objective of Gurpreet et al.'s study, we calculated the sample size of 80 patients with a 95% confidence interval, 80% power, 1 group ratio, and 0.9 mean difference.

CONCLUSION:

Hereby, we concluded that, this study shows both 0.75% Hyperbaric Ropivacaine and 0.5% hyperbaric Levobupivacaine exhibits similar onset and duration for sensory and motor blocks, with prolonged duration of effective analgesia, and stable hemodynamics. Hence, both Hyperbaric Ropivacaine and Levobupivacaine in equipotent doses can be considered safe and effective alternatives to Hyperbaric Bupivacaine in spinal anaesthesia.

Original title

COMPARING THE POST-OPERATIVE ANALGESIC EFFECTS OF ERECTOR SPINAE PLANE BLOCK AND TRANSVERSUS ABDOMINIS PLANE BLOCK IN PATIENTS UNDERGOING ELECTIVE CESAREAN SECTION – A PROSPECTIVE RANDOMIZED STUDY.

Sruthi Shashikumar, Radhakrishnan, Chandraleela. Department of Anesthesiology

BACKGROUND :

Effective postoperative analgesia following a caesarean section is vital because it promotes early ambulation and breastfeeding. Opioids are most commonly used to provide effective pain relief but have several side effects. As an alternative, truncal blocks and interfascial plane blocks for postoperative analgesia have been used. Transversus abdominis plane block and Erector spinae plane block are effective components of multi-modal analgesia after caesarean section.

MATERIALS AND METHODS :

A randomised, double-blinded, prospective study on 70 parturient belonging to the age group 18yrs-40yrs, who were scheduled for elective caesarean section under spinal anaesthesia was done. Patients were randomly allocated to one of the two as group A (n=35) & group B (n=35). Each group received 0.2% Ropivacaine 0.2mL/kg bilaterally under ultrasound guidance. Duration of analgesia was studied.

RESULTS :

In this comparative study, Erector spinae plane block group (Group B) had a longer duration of analgesia, reduction in VAS scale, and lower number of rescue analgesic doses when compared to Transversus abdominis plane block (Group A). The mean duration of analgesia in Group A was 7.53 ± 0.29 hours and group B showed 9.47 ± 0.31 hours. This was statistically significant with a p-value of 0.000. Similarly, VAS scores in group B were statistically significantly lower compared to group A at 8 hours, 10 hours, and 12 hours with p-values of 0.000, 0.001, and 0.000 respectively. The number of rescue analgesic doses was lower in group B compared to group A, which was statistically significant with a p-value of 0.000.

CONCLUSION :

The study concluded that the Erector spinae plane block provided a longer duration of analgesia when compared to Transversus abdominis plane block. Therefore, the Erector spinae plane block can be adopted as an alternative technique for the management of postoperative pain in caesarean section under spinal anaesthesia.

Original title**COMPARISON OF SUBLINGUAL NITROGLYCERINE SPRAY AND ORAL LIGNOCAINE SPRAY IN ATTENUATING THE PRESSOR RESPONSE TO LARYNGOSCOPY – A RANDOMISED CONTROLLED TRIAL****Subiksha,. Radhakrishnan.. Samson David** Department of Anesthesiology**BACKGROUND :**

Hemodynamic changes, such as hypertension and tachycardia frequently occur during intubation under light anaesthesia. Especially during laryngoscopy and airway manipulation. Multiple pharmacological and non-pharmacological techniques are used to mitigate this response. However, no single approach is entirely satisfactory. Hence our study compares the efficacy of sublingual nitro-glycerine spray with oral lignocaine spray in attenuating the pressor response during laryngoscopy.

AIMS AND OBJECTIVES:

Our study aimed to analyse the efficacy of sublingual nitro-glycerine spray versus lignocaine spray in attenuating the pressure response during laryngoscopy. The primary objective of the study was to observe changes in heart rate between the two study groups and the secondary objective was to observe changes in systolic blood pressure, diastolic blood pressure and mean arterial pressure.

MATERIALS AND METHODS:

Randomly 100 patients of ASA I and II who underwent elective surgeries under general anaesthesia were divided into two groups i.e., Group A – NTG spray 0.4mg and Group B – lignocaine spray 10mg. Hemodynamic parameters such as heart rate, systolic blood pressure, diastolic blood pressure, mean arterial pressure and oxygen saturation were noted at different time intervals such as preinduction, 1 min, 3 mints, 5 mints and 10 mints after induction. SRC NUMBER: SVMC/SRC/2022/23/CTR704 IEC NUMBER: 43/SVMCH/IEC-Cert/Aug22

RESULTS:

In Group B, there was a statistically significant increase in heart rate after 3 mints of induction and remained high even at 5 mints and 10 mints. Whereas in group A, mean heart rate was nearly same as that of baseline. In the comparison of mean SBP, mean DBP, mean MAP and mean SPO2 between Group A and Group B, in Group B there was an increase in mean SBP, mean DBP, mean MAP after 3 mints of induction and remained high even at 5 mints and 10 mints which was statistically significant.

CONCLUSION:

Our study concludes that nitro-glycerine spray was more effective than lignocaine in attenuating hemodynamic changes during elective laryngoscopy and intubation.

Original title**COMPARISON OF SUBLINGUAL NITROGLYCERINE SPRAY AND ORAL LIGNOCAINE SPRAY IN ATTENUATING THE PRESSOR RESPONSE TO LARYNGOSCOPY – A RANDOMISED CONTROLLED TRIAL****Santhosh., Krishnaprabu., Chandraleela,** Department of Anesthesiology**BACKGROUND :**

Supraclavicular brachial plexus block is the most preferred technique in upper limb surgeries. Bupivacaine is commonly used in regional techniques as it has rapid onset and longer duration of anesthesia. Levobupivacaine which is pure S-enantiomer have same pharmacological effects of Bupivacaine with lesser cardiovascular and CNS toxicity. Various adjuvants have been added to local anesthetics to improve duration of analgesia. Dexmedetomidine, an α -2 agonist added to Bupivacaine and Levobupivacaine extends the duration of block and analgesia.

OBJECTIVES: To compare the efficacy between onset and duration of sensory, motor block, duration of analgesia, hemodynamic parameters and number of rescue analgesics required post operatively between the groups.

MATERIALS AND METHODS: A prospective randomized study was conducted after clearance from ethical committee. 60 patients between 18-60 years of ASA I and II scheduled for upper limb surgeries under supraclavicular brachial plexus block who met the requirements of inclusion and exclusion criteria. The patients were divided into two groups- Group A received 25ml of 0.5% Bupivacaine with 50 μ g of Dexmedetomidine and Group B received 25ml of 0.5% Levobupivacaine with 50 μ g of Dexmedetomidine. Onset and duration of sensory, motor blockade and duration of analgesia were observed as primary outcome. Hemodynamic parameters and number of requirements of post operative analgesics as secondary outcome. The data were analyzed and tabulated using independent sample 't' test and repeated Anova. SRC NUMBER: SVMC/SRC/2022/23/CTR 699.IEC NUMBER: NO.33/SVMCH/IEC-CERT/AUG22

RESULTS: Onset of sensory block among group B was 7.10 ± 1.24 min and group L was 8.67 ± 1.15 min ($p < 0.001$), Onset of motor block among group B was 9.40 ± 1.04 min and group L was 11.87 ± 1.19 min ($p < 0.000$), duration of sensory block among group L was 898.00 ± 89.42 min and group B was 643.33 ± 42.45 min ($p < 0.001$), duration of motor block among group L was 719.67 ± 85.64 min and group B was 475.33 ± 41.42 min ($p < 0.001$), duration of analgesia among group L was 17.70 ± 4.98 hours and group B was 15.57 ± 1.19 hours ($p = 0.029$). Hence from above observation, onset and duration of sensory block and motor block was earlier in group B and duration of analgesia was prolonged in group L which showed statistically significant. There was no statistically significant difference between both groups with respect to side effects like bradycardia, hypotension, pneumothorax, hemodynamic parameters and rescue analgesics postoperatively.

CONCLUSION: Dexmedetomidine when used as an adjuvant to Bupivacaine and Levobupivacaine in supraclavicular brachial plexus block under ultrasound guidance showed better results in Levobupivacaine group. It provided long lasting analgesia and fewer rescue analgesics.

CORRELATION OF SYMPHYSIOfUNDAL HEIGHT AND ABDOMINAL GIRTH WITH THE INCIDENCE OF HYPOTENSION IN CAESAREAN SECTION UNDER SPINAL ANAESTHESIA USING 0.5% HYPERBARIC BUPIVACAINE

Amala Cynthia Empress*, **Krishna Prabu ***, **Samson David.**, Department of Anesthesiology

INTRODUCTION :

Spinal anaesthesia is the most preferred method for caesarean section. One of the common complications of spinal anaesthesia is hypotension with an incidence of 70-80% which may lead to adverse fetal and maternal outcomes. So, various maternal and fetal predictors have been used to anticipate the occurrence of hypotension after spinal anaesthesia. In our study, we correlate the incidence of hypotension with symphysiofundal height and abdominal girth.

AIMS AND OBJECTIVES :

This study aims to correlate the symphysiofundal height and abdominal girth with the incidence of hypotension in caesarean section after spinal anaesthesia using 0.5% Hyperbaric Bupivacaine. The primary objective is to study the effect of symphysiofundal height and abdominal girth on the incidence of hypotension and secondary objective is to study the effect of abdominal girth on the spread of local anaesthetic drug.

MATERIALS AND METHODS :

An observational study was carried after clearance from ethical committee. Based on the inclusion and exclusion criteria, 85 parturients were selected between age group of 18-35 years who come under ASA II scheduled for elective caesarean section under spinal anaesthesia at the Department of Anaesthesiology, Sri Venkateshwara Medical College Hospital & Research Centre, Puducherry from September 2022 to February 2024. Preoperative assessment was done and the symphysiofundal height and abdominal girth was measured. On the day of surgery, parturients were shifted and monitors were connected (Heart rate, oxygen saturation and non-invasive blood pressure). The parturients underwent caesarean section under spinal anaesthesia using 2 ml of 0.5% Hyperbaric Bupivacaine. Systolic, diastolic, mean arterial blood pressure and level of sensory blockade were measured at regular intervals throughout the procedure. The data was tabulated and analysed. The chi-square test was used to determine the relationship between categorical variables. P-value < 0.05 is regarded as indicating an association between the variables.

RESULTS AND DISCUSSION :

The incidence of hypotension was higher in parturients with higher abdominal girth (>105 cm) which was about 22% compared to that of smaller abdominal girth group (<105 cm) who had 12% occurrence of hypotension and the comparison was found to have a p value of 0.002 which was statistically significant. The comparison of symphysiofundal height with the incidence of hypotension was not found to be statistically significant with p value of 0.199. The study also showed that parturients with large abdominal girth (>105 cm) attained higher level of sensory blockade earlier than the pregnant women with small abdominal girth (<105 cm) which was found to be statistically significant with P value of 0.0001.

CONCLUSION:

In term parturients who are undergoing caesarean section under spinal anaesthesia using 0.5% hyperbaric bupivacaine, abdominal girth can be used as a preoperative predictor for the incidence of hypotension and level of sensory blockade as it has shown significant positive correlation.

Original title

COMPARATIVE STUDY BETWEEN INTRATHECAL 0.5% LEVOBUPIVACAINE WITH DEXMEDETOMIDINE AND INTRATHEAL 0.5% BUPIVACAINE WITH DEXMEDETOMIDINE IN ELECTIVE INFRAUMBILICAL SURGERIES

Chowndharryaa, Chinthavali Sujatha, Suganya., Department of Anesthesiology

BACKGROUND:

The most commonly performed anaesthetic technique for infraumbilical surgeries is spinal anaesthesia. It is safe, reliable and an inexpensive technique. It negates the side effects associated with general anaesthesia. Levobupivacaine preferred for its lesser cardiotoxicity, better safety profile and offers a considerably longer sensory blockade and motor blockade duration than bupivacaine. Dexmedetomidine, highly selective alpha2 adrenoreceptor added as adjuvants to local anaesthetics enhances the block properties of local anaesthetics and also provides sedative and analgesic and prolongs the anaesthesia duration and reduces requirements of rescue analgesia.

OBJECTIVES:

The study aim is to evaluate the efficacy between intrathecal levobupivacaine with dexmedetomidine and intrathecal bupivacaine with dexmedetomidine in infraumbilical surgeries.

MATERIAL AND METHODS:

A randomized, double-blinded, prospective study on 60 patients of ASA I and II undergoing infraumbilical surgeries under spinal anaesthesia. Patients were randomly allocated to one of the two groups as GROUP A (n= 30) and GROUP B (n=30). Each group received 3.5 ml of 0.5% levobupivacaine with dexmedetomidine (GROUP A) or 3.5 ml of 0.5% bupivacaine with dexmedetomidine (GROUP B). Characteristics of sensory and motor blocks, haemodynamic changes, duration of analgesia, adverse effects, visual analogue score (VAS) and analgesic requirement were studied at different time intervals.

RESULTS:

In this comparative study between 0.5% levobupivacaine with 5 micrograms dexmedetomidine and 0.5% bupivacaine with 5 micrograms dexmedetomidine in subarachnoid blockade. Group A patients had longer duration of sensory and motor block when compared with Group B patients. Onset of sensory and motor blockade is earlier in group B. Duration of analgesia is longer in group A with significant reduction in VAS score at 6th and 12th hour respectively. The number of rescue analgesia required in group A is less when compared to group B.

CONCLUSION:

Our study results showed that, levobupivacaine with dexmedetomidine provides more effective anaesthesia in term of onset, duration of sensory and motor block along with longer period of post operative analgesia with lesser side effects, better patient's and surgeon's satisfaction in comparison to bupivacaine with dexmedetomidine.

Original title**COMPARISON OF ISOBARIC AND HYPERBARIC ROPIVACAINE IN SPINAL ANAESTHESIA IN LOWER LIMB SURGERIES-A RANDOMISED CONTROLLED TRIAL****Ragu ram., Radhakrishnan., Samson david,** Department of Anesthesiology**BACKGROUND:**

The first significant regional method used in clinical practice was spinal anaesthesia. Using a variety of local anaesthetic drugs, it is a safe, dependable, and cost-effective approach that has the benefit of delivering surgical anaesthesia and extended post-operative pain management. Spinal anaesthesia reduces autonomic, somatic, endogenous, and intraoperative pain. It offers an efficient sensory and motor blockage with a quicker onset. This study aims to compare the onset and duration between isobaric and hyperbaric Ropivacaine given intrathecally in lower limb surgeries.

MATERIAL AND METHODS:

A randomized, double-blinded, prospective study on 70 patients of ASA I and II undergoing lower limb surgery was done. GROUP A received 3.5 millilitres of isobaric 0.75% Ropivacaine, while those in GROUP B received 3.5 millilitres of hyperbaric 0.75% ropivacaine. Characteristics of sensory and motor blocks, haemodynamic changes, duration and quality of analgesia, visual analogue score (VAS) were studied at different time intervals.

RESULTS:

Group B patients had onset of sensory block in 6.7 ± 1.5 mins and motor block in 8.6 ± 1.4 mins when compared with Group A patients onset of sensory block was in 7.2 ± 1.7 mins and motor block in 9.3 ± 1.6 mins. Duration of sensory block is longer in Group B 191.52 ± 26.3 mins than Group A is 148.29 ± 23.4 mins. Duration of motor block was found to be longer in Group B 182.14 ± 55.5 mins when compared with Group A 123.94 ± 4.3 mins which is highly statistical significant. VAS at 5 hours had significant P value (<0.005) and mean duration of analgesia was significantly prolonged in Group B. The haemodynamic parameters were statistically significant difference on Group B comparing with Group A.

CONCLUSION:

The findings of our study demonstrated that hyperbaric Ropivacaine and isobaric Ropivacaine may both provide sufficient motor and sensory blockade and be applied to lower limb surgeries. Compared to isobaric Ropivacaine, hyperbaric Ropivacaine produces anaesthesia more effectively in terms of the onset, length, and duration of sensory and motor block, as well as a longer period of post-operative analgesia with fewer side effects and higher satisfaction from patients and surgeons.

Original title

Opioid-free versus opioid-based anaesthesia for elective laparoscopic surgery - A double blinded randomized controlled trial

Ramyadevi, Jayashri Devi, Chinthavali Sujatha Department of Anesthesiology

BACKGROUND:

Patients undergoing laparoscopic surgery often experience moderate to severe postoperative pain. Opioid based anaesthesia can result in respiratory depression, sedation, postoperative nausea, vomiting and other side effects. In opioid free anaesthesia, a multimodal anaesthetic approach is being studied as a means of avoiding opioids throughout the perioperative and postoperative period. In this study we analysed the efficacy of opioid-free and opioid-based anaesthesia in terms of intraoperative hemodynamic stability and post operative analgesia requirement in patients undergoing elective laparoscopic surgery under general anaesthesia.

MATERIAL AND METHODS:

A randomized, double-blinded, prospective study on 60 patients aged 18-60 years of ASA I and II undergoing laparoscopic surgery under general anaesthesia. Patients were randomly allocated to one of the two groups as GROUP A(n=30) and GROUP B(n=30). GROUP A received opioid free anaesthesia with dexmedetomidine, ketamine, paracetamol and magnesium sulphate and GROUP B received opioid based anaesthesia with fentanyl and morphine. Intraoperative HR, SBP, DBP, MAP, SPO2 and postoperative duration and quality of analgesia and adverse effects were studied at different time intervals.

RESULTS:

Both opioid-free and opioid-based group could maintain perioperative haemodynamic stability. Group A had a significant lower mean VAS score (0.725 ± 0.052) compared to Group B (1.138 ± 0.052). Mean duration of rescue analgesia in Group A was 920 min and in Group B was 428 min which was statistically significant (p value < 0.001).

CONCLUSION:

The study demonstrated that both opioid-free and opioid-based anaesthesia could maintain intraoperative hemodynamic stability and of a exhibited a lower VAS score, longer analgesic duration and required lesser rescue analgesia in the first 24 hours postoperatively without PONV in patients undergoing laparoscopic surgery under general anaesthesia.

Original title

"COMPARING THE EFFICACY OF HYPERBARIC ROPIVACAINE AND HYPERBARIC LEVOBUPIVACAINE FOR ELECTIVE SURGERIES UNDER SPINAL ANESTHESIA - A RANDOMISED CONTROLLED TRIAL

Palepu Gowthami., Jayashri devi., Suganya., Department of Anesthesiology

BACKGROUND:

The development of spinal anaesthesia, which started with August Bier's seminal work in 1899, is a watershed moment in medical history¹. Spinal anaesthesia is now more effective and safer than ever before because of newly developed local anaesthetics that have a longer half-life and less toxicity. Spinal anaesthesia is becoming more appealing for a range of surgeries due to recent improvements that provide long-lasting pain relief after surgery without major adverse effects. Combining spinal anaesthesia with other regional techniques, such as nerve blocks, improves the results of pain control. More thorough analgesia can be achieved using this method, which is especially important for complicated surgeries when postoperative pain management is paramount.

AIM AND OBJECTIVES :

blockade between the groups. AIM To compare the efficacy of Hyperbaric Ropivacaine and Hyperbaric Levobupivacaine in elective surgeries under spinal anaesthesia.

Primary objective: "To compare the onset and duration of sensory blockade and motor

MATERIALS AND METHODS :

This randomised, prospective, double-blinded trial was undertaken at Sri Venkateshwaraa Medical College Hospital & Research Centre in Ariyur between 2022- 2024. This study aimed to assess the efficacy of spinal anaesthesia in elective procedures in patients aged 18-60yrs, both genders, and ASA physical status I & II. Criteria's that precluded patient participation were local infection at injection site, patient refusal, coagulopathies, psychiatric disease or antipsychotic medication use, pregnancy, local anaesthetic allergy, and conversion to general anaesthesia during the surgery. Based on the primary objective of Gurpreet et al.'s study, we calculated the sample size of 80 patients with a 95% confidence interval, 80% power, 1 group ratio, and 0.9 mean difference.

CONCLUSION:

Hereby, we concluded that, this study shows both 0.75% Hyperbaric Ropivacaine and 0.5% hyperbaric Levobupivacaine exhibits similar onset and duration for sensory and motor blocks, with prolonged duration of effective analgesia, and stable hemodynamics. Hence, both Hyperbaric Ropivacaine and Levobupivacaine in equipotent doses can be considered safe and effective alternatives to Hyperbaric Bupivacaine in spinal anaesthesia.

Original title

COMPARING THE POST-OPERATIVE ANALGESIC EFFECTS OF ERECTOR SPINAE PLANE BLOCK AND TRANSVERSUS ABDOMINIS PLANE BLOCK IN PATIENTS UNDERGOING ELECTIVE CESAREAN SECTION - A PROSPECTIVE RANDOMIZED STUDY.

Sruthi Shashikumar, Radhakrishnan, Chandraleela Department of Anesthesiology

BACKGROUND:

Effective postoperative analgesia following a caesarean section is vital because it promotes early ambulation and breastfeeding. Opioids are most commonly used to provide effective pain relief but have several side effects. As an alternative, truncal blocks and interfascial plane blocks for postoperative analgesia have been used. Transversus abdominis plane block and Erector spinae plane block are effective components of multi-modal analgesia after caesarean section.

MATERIALS AND METHODS :

A randomised, double-blinded, prospective study on 70 parturient belonging to the age group 18yrs-40yrs, who were scheduled for elective caesarean section under spinal anaesthesia was done. Patients were randomly allocated to one of the two as group A (n=35) & group B (n=35). Each group received 0.2% Ropivacaine 0.2mL/kg bilaterally under ultrasound guidance. Duration of analgesia was studied.

RESULT:

In this comparative study, Erector spinae plane block group (Group B) had a longer duration of analgesia, reduction in VAS scale, and lower number of rescue analgesic doses when compared to Transversus abdominis plane block (Group A). The mean duration of analgesia in Group A was 7.53 ± 0.29 hours and group B showed 9.47 ± 0.31 hours. This was statistically significant with a p-value of 0.000. Similarly, VAS scores in group B were statistically significantly lower compared to group A at 8 hours, 10 hours, and 12 hours with p-values of 0.000, 0.001, and 0.000 respectively. The number of rescue analgesic doses was lower in group B compared to group A, which was statistically significant with a p-value of 0.000.

CONCLUSION :

The study concluded that the Erector spinae plane block provided a longer duration of analgesia when compared to Transversus abdominis plane block. Therefore, the Erector spinae plane block can be adopted as an alternative technique for the management of postoperative pain in caesarean section under spinal anaesthesia.

KEYWORDS :

Analgesia, Cesarean section, Erector spinae plane block, Ropivacaine, Transversus abdominis plane block.

Original title**COMPARISON OF SUBLINGUAL NITROGLYCERINE SPRAY AND ORAL LIGNOCAINE SPRAY IN ATTENUATING THE PRESSOR RESPONSE TO LARYNGOSCOPY - A RANDOMISED CONTROLLED TRIAL****Subiksha., Radhakrishnan., Samson David.** Department of Anesthesiology**BACKGROUND:**

Hemodynamic changes, such as hypertension and tachycardia frequently occur during intubation under light anaesthesia. Especially during laryngoscopy and airway manipulation. Multiple pharmacological and non-pharmacological techniques are used to mitigate this response. However, no single approach is entirely satisfactory. Hence our study compares the efficacy of sublingual nitro-glycerine spray with oral lignocaine spray in attenuating the pressor response during laryngoscopy.

AIMS AND OBJECTIVES:

Our study aimed to analyse the efficacy of sublingual nitro-glycerine spray versus lignocaine spray in attenuating the pressure response during laryngoscopy. The primary objective of the study was to observe changes in heart rate between the two study groups and the secondary objective was to observe changes in systolic blood pressure, diastolic blood pressure and mean arterial pressure.

MATERIALS AND METHODS:

Randomly 100 patients of ASA I and II who underwent elective surgeries under general anaesthesia were divided into two groups i.e., Group A - NTG spray 0.4mg and Group B - lignocaine spray 10mg. Hemodynamic parameters such as heart rate, systolic blood pressure, diastolic blood pressure, mean arterial pressure and oxygen saturation were noted at different time intervals such as preinduction, 1 min, 3 mints, 5 mints and 10 mints after induction. SRC NUMBER: SVMC/SRC/2022/23/CTR704 IEC NUMBER: 43/SVMCH/IEC-Cert/Aug22

RESULTS:

In Group B, there was a statistically significant increase in heart rate after 3 mints of induction and remained high even at 5 mints and 10 mints. Whereas in group A, mean heart rate was nearly same as that of baseline. In the comparison of mean SBP, mean DBP, mean MAP and mean SPO2 between Group A and Group B, in Group B there was an increase in mean SBP, mean DBP, mean MAP after 3 mints of induction and remained high even at 5 mints and 10 mints which was statistically significant.

CONCLUSION:

Our study concludes that nitro-glycerine spray was more effective than lignocaine in attenuating hemodynamic changes during elective laryngoscopy and intubation.

Original title**A CLINICO-ETIOLOGICAL STUDY OF VULVAL PRURITUS IN WOMEN AT A TERTIARY CARE CENTRE IN PUDUCHERRY****Niharikaa., Manobalan., D.V.L, Hiremath.,** Professor & HEAD Department of OBG**BACKGROUND:**

Vulval pruritus is a chronic and debilitating symptom frequently associated with various dermatological conditions affecting the female genitalia. It significantly impacts quality of life, sexual function, sleep, self-esteem, and psychological well-being. The aetiology of vulval pruritus varies by age due to factors like estrogen levels, skin barrier function, and local environmental factors. This study aims to assess the clinical pattern of vulval pruritus in women across different age groups and identify major etiological factors.

METHODS:

A cross-sectional study was conducted over 1 year and 6 months at the dermatology outpatient department of Sri Venkateshwaraa Medical College Hospital and Research Centre, Puducherry. The study included 70 adult women with vulval pruritus. Data were collected through clinical history, physical examination, and laboratory investigations. Statistical analysis was performed using Stata software to determine the prevalence, associated factors, and clinical characteristics.

RESULTS:

The mean age of participants was 42.5 years. The highest prevalence of vulval pruritus was observed in the reproductive age group (40%), followed by postmenopausal (28.6%), perimenopausal (24.3%), and menopausal (7.1%) groups. Infective causes were identified in 69% of cases, with vulvovaginal candidiasis (27.1%) being the most common, particularly in reproductive-aged women. Non-infective causes accounted for 31% of cases, including conditions such as lichen simplex chronicus and lichen sclerosis et atrophicus. Comorbidities such as diabetes mellitus were present in 21.4% of patients, predominantly among postmenopausal women. Poor hygiene practices and a history of unprotected sex were significant contributing factors.

CONCLUSION:

Infectious causes, especially vulvovaginal candidiasis and candidal intertrigo, are the predominant aetiologies of vulval pruritus in women across various age groups. Non-infective causes also play a significant role, varying by age and hormonal status. A comprehensive clinical evaluation, including an assessment of sexual history, hygiene practices, and comorbidities, is essential for accurate diagnosis and effective management. Further research is needed to explore the influence of hormonal changes, comorbidities, and lifestyle factors on vulval pruritus.

Original title

A CLINICO INVESTIGATIVE STUDY OF FACIAL ACANTHOSIS NIGRICANS AT A TERTIARY CARE CENTRE IN PUDUCHERRY.

Kovalan vishwanath., Brinda G David, Yoginder Singh, Department of D.V.L

BACKGROUND:

Facial acanthosis nigricans (FAN) is defined as brown to black macular pigmentation with blurred ill defined margins and velvety appearance seen over zygomatic region or anywhere on face with varying degrees of textural changes. Increased prevalence of FAN was observed in patients with metabolic syndrome and obesity recently. We present an observational analytical study to determine the association of grading of FAN with metabolic syndrome, obesity and insulin resistance.

MATERIALS AND METHODS:

It was an observational study including all 70 patients above 18 years of age with features of facial acanthosis nigricans and excluding pregnant women and patients on chronic steroid therapy. For each patient parameters like waist circumference(WC), waist hip ratio(WHR), Body mass index(BMI), Blood pressure(BP), fasting blood sugar(FBS), Fasting lipid profile(FLP), Fasting serum insulin, HOMA2 IR were calculated along with dermoscopy were done. SRC : SVMC/SRC/2024/CTR 1045. IEC : 123/SVM-CH/IEC-Cert/February24

RESULTS:

Among 70 patients, mean age of patients was 44.7 in males and 44.47 in females. Most common pattern of FAN was patchy type which was more commonly seen in temporal region apart from the classical zygomatic region. Dyslipidemia was seen in 58.5% patients and dysglycemia was seen in 54.3% patients and 31.5% patients had varying degrees of insulin resistance. Based on sharqie's severity grading, majority(45.7%) had grade 3 severity of FAN.

CONCLUSION:

Facial acanthosis nigricans is newer entity and frequently misdiagnosed as a type of facial melanosis. There was no statistically significant association between the severity of FAN grading and presence of factors like insulin resistance, metabolic syndrome, abdominal obesity, hypertryglyceridemia, dysglycemia and hypertension in our study. FAN may be considered as a cutaneous marker of underlying metabolic syndrome, Insulin resistance and it's complications.

Original title**A COMPARATIVE STUDY OF FRACTIONAL CO₂ LASER EFFICIENCY IN THE TREATMENT OF STRIAE RUBRA AND STRIAE ALBA IN A TERTIARY HEALTH CARE CENTRE****LakshmiPrasad., Manobalan.,Yogindher Singh** Department of D.V.L**BACKGROUND:**

Striae Distensae (SD) or stretch marks are common linear and atrophic dermal lesions which arise due to the stretching of the dermis. There are two forms of SD; striae rubra (acute) and striae alba (chronic). SD has no standard treatment protocol until now.

AIM :

To evaluate the efficacy of fractional Carbon dioxide laser in the treatment of Striae rubra vs Striae alba, To know whether an early intervention with Fractional CO₂ brings about better outcome of the striae.

METHODS :

Sixty patients with clinical diagnosis of Striae Rubrae and Striae Albae were included in the study. Detailed history taking, examination was done, and informed written consent were obtained. The lesion was subjected to Fractional CO₂ laser therapy (using Fractional CO₂ laser model: SUDARFRAX (0.1 W to 30W) DC excited glass tube) after topical application of 2.5% lidocaine and 2.5% prilocaine cream for 45 minutes. Each patient received 3 sessions with 4 weeks interval and then followed up after 12 weeks (3 months) of last laser session. (Total 4 visits for each patient). Pre and post procedure photographs of the lesion were recorded by digital mobile camera (64 megapixel).

RESULTS :

Overall improvement was assessed clinically at week 20 based on the improvement in the width reduction and skin texture. Eight patients (13.33%) had near total improvement, 23 (38.33%) had marked improvement, 19 (31.66%) had moderate improvement and 5 (8.33%) had mild improvement. All patients had significant improvement of the lesions with grades ranging from 1 to 4. Patient satisfaction assessed subjectively at 20 weeks with a quartile grade scale in this study showed marked and moderate satisfaction in 12 (20%) and 15 (25%) patients respectively. 13 (21.67%) and 15 (25%) patients showed mild and poor satisfaction. None of them had poor satisfaction. More than 50% improvement was seen in 45% of patients. All patients were satisfied with the treatment results. However there is no statistically significant difference between onset of the lesion (early /late) and the overall improvement with treatment.

CONCLUSION :

Study showed significant clinical improvement in both types of Striae Distensae treated by Fractional CO₂ Laser though both group had no significant difference with treatment but no significant association between the type of onset i.e., either acute or chronic with the treatment outcomes was seen. CO₂ laser can be considered as a remedial measure for the patient who wish to have better results with laser treatment for Striae Distensae. This study is limited by small population and lack of histopathological correlation.

Original title

A CLINICO-EPIDEMIOLOGICAL AND ONYCHOSCOPIC STUDY OF NAIL CHANGES IN PAPULOSQUAMOUS DISORDERS AT A TERTIARY CARE CENTRE IN PUDUCHERRY

Vijay, Brinda G David .,Manobalan Karunanandhan., Yogindher Singh Department of Dermatology, Venereology and Leprosy,

INTRODUCTION:

Nails are an integral part of the integumentary system which aid in protection, tactile perception, motor functions in addition to their cosmetic value. Onychoscopy, a dermoscopy of the nail unit enables visualization of the subtle changes of the nail unit which are invisible to the naked eye.

AIM:

To study the onychoscopic findings and clinical patterns of nails in papulosquamous disorders.

MATERIAL AND METHODS:

This is a cross-sectional study with purposive sampling. Following inclusion and exclusion criteria, 62 patients with papulosquamous disorders were recruited. Each fingernail and toenail were numbered from 1 to 10, and detailed clinical assessment was conducted. Utilizing the Heine Delta 20 dermatoscope, detailed onychoscopic examinations were carried out.

RESULTS:

Out of the 62 subjects, 47 were male, with Psoriasis being the most prevalent disorder (75.8%). A significant proportion (89%) of patients exhibited nail abnormalities, with onycholysis being the predominant clinical and dermoscopic change in psoriasis. Onychoscopy proved superior in visualizing nail alterations such as onycholysis, splinter hemorrhages, salmon patches, and dilated onychodermal band capillaries.

CONCLUSION:

Onychoscopic evaluation in papulosquamous disorders facilitates the detection of subtle alterations in the nails that are imperceptible to the unaided eye. Despite biopsy serving as the benchmark diagnostic procedure for papulosquamous disorders, its invasiveness, discomfort, and diagnostic delays are noteworthy drawbacks. Onychoscopy, a non-invasive, cost-effective modality, can either complement or serve as an alternative to nail biopsy in papulosquamous disorders.

Original title

Objective and Subjective outcome measures in conventional curettage adenoidectomy versus endoscopic guided microdebrider assisted adenoidectomy- A prospective randomized Single blinded study

V.Kiruthika., V.Prabu., Department of ENT

INTRODUCTION :

Adenoid hypertrophy is a common disease in the community. Adenoid hypertrophy can entirely obstruct the nasopharynx, leading to the Eustachian tube obstruction, which causes otitis media with effusion and chronic discharging of the ear. Adenoidectomy is the definite way of managing the disease, and it is one of the most common surgeries performed in the day-to-day practice of ENT surgeons. Various surgical and non-surgical procedures have been developed to remove adenoids so far. And each had their own merits and demerits.

METHODS:

This single-blinded randomised controlled trial was conducted in the Ariyur department of ENT, SVMCH & RC—patients with symptoms of adenoid hypertrophy. The study was conducted for 18 months, from October 2022 to March 2024. All patients were divided equally into two groups. All the patients in Group A were subjected to adenoidectomy by conventional curettage method with the help of St. Clair Thomson adenoid curette, and all the patients in Group B were subjected to adenoidectomy with the help of the endoscopic guided microdebrider assisted adenoidectomy.

RESULTS:

A total of 60 patients participated in the study. The study showed a significant difference in the mean bleeding volume ($p<0.0001$), mean operative time ($p<0.001$), and residual tissue ($p<0.001$). However, the study found no significant difference in the mean recovery time between the groups. The study also found no significant difference in the pain between the two groups on postoperative days one and seven. On assessing the development of the intra-operative complications, in Group A, about ten patients had trauma to the Eustachian tube opening, followed by trauma to the uvula and gums. The least amount of patients had injury to the lips and the anterior tonsillar pillars. In Group B, only two patients had injuries to the Eustachian tube opening, and only a negotiable amount of patients had injuries to the lips and gums.

CONCLUSION

Although the microdebrider group is associated with increased bleeding during surgery and increased intraoperative time, it is also associated with decreased intraoperative post-operative complications, fewer residual tissues, and improvement of the symptoms in the postoperative period. Though the surgery cost is higher than the conventional technique, precise dissection under endoscopic vision, fewer complications, and better disease clearance make this technique safe and efficacious.

Original title**IMPACT OF CHRONIC SINONASAL INFLAMMATORY DISORDERS ON EUSTACHIAN TUBE FUNCTION: A CLINICO - AUDIOLOGICAL STUDY IN A TERTIARY CARE INSTITUTE****Vignesh., Prabu., Joemol john** Department of ENT**INTRODUCTION :**

The middle ear cavity and the nasopharynx are connected by the eustachian tube, also called the pharyngotympanic tube or auditory tube. Three physiological purposes are served by the eustachian tube (ET). They are: (1) controlling pressure; (2) shielding the middle ear from foreign objects or infections in the nasopharynx; and (3) clearing the middle ear space. ETD is regarded as the main pathophysiology in the majority of middle ear conditions. Middle ear secretion clearance into the nasopharynx and middle ear pressure control depend on an anatomically patent ET with appropriate physiological functioning. Many conditions, including serous otitis media, adhesive otitis media, and acute or chronic suppurative otitis media (CSOM), can result from a disruption in these processes. When organizing the treatment of middle ear disorders, the evaluation of tubal function is crucial.1 Patients with a higher load of sinonasal symptoms are more susceptible to ETD, mucosal middle ear disease, and concomitant otologic complaints. Allergy-induced rhinitis, CRSsNP, CRSwNP, and allergic fungal rhinosinusitis are the sinonasal inflammatory disorders.2 Chronic inflammation of the nose and paranasal sinuses are the hallmark of the diverse collection of illnesses known as CRS. According to EPOS 2022, CRS may be roughly divided into two categories: Chronic rhinosinusitis with nasal polyp (CRSwNP) and Chronic rhinosinusitis without nasal polyp (CRSsNP). Subjective symptoms are crucial in determining the severity of the disease and the choice of treatment for patients with ETD and chronic rhinosinusitis (CRS). These factors largely affect the patient's quality of life (QOL)

OBJECTIVES :

To estimate the incidence of Eustachian tube dysfunction among patients presenting with sino-nasal inflammatory diseases. To associate the severity of Eustachian tube dysfunction with different types of sino-nasal inflammatory diseases. To correlate the subjective symptoms and objective measurements in patients with Eustachian tube dysfunction associated with chronic sino-nasal inflammatory diseases.

CONCLUSION

Sino-nasal inflammatory conditions like allergic rhinitis, CRS with nasal polyposis and CRS without nasal polyposis are associated with Eustachian Tube Dysfunction which are determined by the following parameters like Eustachian tube dysfunction Questionnaire-7 (ETDQ-7), 22 item - Sino nasal outcome test (SNOT-22) along with other validated metric tools such as tympanometry, Diagnostic nasal endoscopy and Otoendoscopy. Therefore, these parameters have a pivotal role in the diagnosis of pharyngotympanic tube dysfunction and might provide clinical information that differentiates ETD from conditions with similar symptomatology

Original title

“GRAFT UPTAKE AND HEARING OUTCOMES IN MYRINGOPLASTY BY CONVENTIONAL TEMPORALIS FASCIA UNDERLAY TECHNIQUE WITH & WITHOUT ADDITION OF PLATELET – RICH FIBRIN (PRF): A PROSPECTIVE, RANDOMIZED, DOUBLE – BLIND STUDY.”

Anbulavanya, Department of ENT

INTRODUCTION :

Chronic otitis media- safe type is one of the common otological problem causing hearing loss in developing countries. It is defined as persistent inflammation of middle ear, mastoid mucosa associated with recurrent discharge for atleast 2 weeks through the chronic perforation of the tympanic membrane. Apart from medical management, myringoplasty remains as the definitive surgical treatment. Myringoplasty aims at repairing the perforation of pars tensa of the tympanic membrane by underlay or overlay technique using various graft like temporalis fascia, cartilage, perichondrium, etc. Platelet Rich Fibrin is autologous product which is safe to use, no chance of disease transmission and it doesn't have mutagenic effect. The preparation and extraction of Platelet Rich Fibrin is easy and quick. Although its benefits are already been established in various surgeries, its effect on the graft uptake and hearing is not been studied well so far. So, this study has been planned to evaluate the effect of Platelet Rich Fibrin application among patients undergoing Myringoplasty

MATERIALS AND METHODS:

It is a randomised prospective study, conducted in Sri Venkateshwaraa Medical College Hospital and Research Centre. Planned for including 76 patients above 18 years. Patients were randomly allocated into 2 groups. Group I: Platelet -rich fibrin group Group II: Control groups In group I patients 5 to 10ml blood was planned to collect in the morning 2 hrs before surgery. Then the blood is sent to blood bank for centrifuging, as the end product we get 3- 4ml of centrifuged Platelet rich fibrin, which was brought to the operation theatre. Patients in both group will undergo Myringoplasty. In group I patients after placing the graft and repositioning the tympanomeatal flap, the gel foam which was soaked in platelet rich fibrin is kept over the sealed perforation. In group II patients plain gel foam is kept and routine procedure is followed. Following the surgery, both the group of patients will be assessed for audiological outcomes and graft uptake by otological examination.

CONCLUSIONS:

This study has been planned to evaluate the effect of platelet rich- fibrin as an additional effect on the graft uptake and hearing outcomes. If the study shows positive results, it will definitely help to improve the surgical procedure with decreased failure rate and also helps to decrease the morbidity of the patient during the post operative period.

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CONCLUSION

Sino-nasal inflammatory conditions like allergic rhinitis, CRS with nasal polyposis and CRS without nasal polyposis are associated with Eustachian Tube Dysfunction which are determined by the following parameters like Eustachian tube dysfunction Questionnaire-7 (ETDQ-7), 22 item - Sino nasal outcome test (SNOT-22) along with other validated metric tools such as tympanometry, Diagnostic nasal endoscopy and Otoendoscopy. Therefore, these parameters have a pivotal role in the diagnosis of pharyngotympanic tube dysfunction and might provide clinical information that differentiates ETD from conditions with similar symptomatology

Original title

A COMPARATIVE STUDY OF EFFICACY OF LETROZOLE VERSUS CLOMIPHENE CITRATE IN OVULATION INDUCTION IN PATIENTS WITH POLYCYSTIC OVARIAN SYNDROME

Athira Pradeep., Sindhujha Sekar., Jaget Nirmala Department of OBG,

BACKGROUND:

Infertility affects approximately 10-15% of couples. The prevalence of PCOS in India was found to be 5 to 10%. This study was conducted to evaluate the efficacy of letrozole as an ovulation inducing agent and to compare it with clomiphene citrate (CC) in infertile women with PCOS.

METHODS :

This was a comparative study. This study includes 120 women referred to obstetrics & gynecology OPD of Sree Venkateshwaraa Medical college Hospital and Research centre, Puducherry, with infertility due to anovulation. The patients were divided in two groups each comprised of 60 patients. In Group-A, 60 women were given LTZ, 5mg for five days of menstrual cycle. In Group-B, 60 women were given CC, 100mg for five days of menstrual cycle. Follicular monitoring was done by TVS on days 10, 12, 14, 16 of the cycle till a mature follicle of size 18mm or more (by averaging inner two diameters of the follicle) was detected. A single injection of hCG 10,000 IU IM was given if at least one follicle was >18 mm and the endometrial thickness at least more than 8 mm.

RESULTS:

Mean age, parity, and the duration of infertility were similar in both groups. Ovulation rate was 71.7% in letrozole group and 66.7% of clomiphene citrate group ($p=0.553$). Monofollicular development was significantly more common in the Letrozole group (46.7%) compared to the Clomiphene Citrate group (23.3%), with a significant chi-square test ($p = 0.007$) and Multifollicular development was significantly more frequent in the Clomiphene Citrate group (53.3%) compared to the Letrozole group (20.0%), with a highly significant p -value ($p = 0.0001$). A significant difference in endometrial thickness was observed, with the Letrozole group showing a mean thickness of 9.21 ± 0.84 mm compared to 8.01 ± 0.78 mm in the Clomiphene Citrate group ($p = 0.0001$).

CONCLUSION :

In conclusion, this study highlights the superior efficacy of Letrozole compared to Clomiphene Citrate in inducing ovulation among patients with Polycystic Ovary Syndrome (PCOS). Letrozole demonstrated advantages in promoting endometrial thickness, achieving a more favorable hormonal profile, and reducing the incidence of multifollicular development. While both medications exhibited comparable rates of ovulation and pregnancy, the distinct benefits of Letrozole suggest its potential as a preferred option in fertility treatment for PCOS patients, emphasizing the importance of personalized approaches in optimizing reproductive outcomes.

Original title**EFFICACY OF INJECTION FERRIC CARBOXYMALTOS E VERSUS INJECTION IRON SUCROSE FOR TREATMENT OF ANAEMIA IN POSTNATAL WOMEN****Madhumitha., Indu., Hiremath.** Department of OBG,

BACKGROUND:

Anaemia is common nutritional deficiency affecting postnatal women. Prevalence of postpartum anaemia varies from 4 to 27 %.(1)Iron deficiency anaemia is one of the important cause for postpartum anaemia .In this study we have compared injection iron sucrose with injection ferric carboxymaltose for treatment of postpartum anaemia.

METHODS:

This is a comparative study.During the study period 116 postnatal women where divided into two groups - Group A received injection ferric carboxymaltose and Group B received injection iron sucrose. Haemoglobin,red blood indices,serum ferritin and peripheral smear were taken at 3rd and 6th weeks respectively for both the groups and their results were compared.

RESULTS:

Anaemia prevalence in India is about 27 % (). In this study haemoglobin level is comparatively more elevated after anaemia correction with injection ferric carboxymaltose than with injection iron sucrose. Serum ferritin and red blood indices were also significantly raised with the use of injection ferric carboxymaltose.These results highlight that ferric carboxymaltose is more potent in replenishing iron reserves and treating anaemia.

CONCLUSION:

Effectiveness and safety of both the iron preparations were compared in this study. The results show that while both the injections raised haemoglobin and serum ferritin levels, Ferric carboxymaltose increases the iron reserves also and side effects were less during the administration of injection ferric carboxymaltose compared to injection iron sucrose.

Original title**A COMPARATIVE STUDY OF ORAL VERSUS VAGINAL MISOPROSTOL IN INDUCTION OF LABOUR AT TERM PRELABOUR RUPTURE OF MEMBRANES****Daggupati Manasa Veena, Jaget Nirmala, Sindhujha Sekar, Hiremath PB,**

Department of OBG,

BACKGROUND:

Prelabour rupture of membranes (PROM) at term is a common obstetric condition, characterized by the spontaneous rupture of the foetal membranes before the onset of labor. Misoprostol is a prostaglandin E1 analogue which is frequently administered for this condition. This study aims to determine the effectiveness of oral or vaginal route of misoprostol for induction of labour and successful vaginal delivery with unfavourable cervix with PROM.

METHODS:

This comparative study included 102 pregnant women with term PROM beyond 37 weeks of gestation. Participants were randomly assigned to receive either oral misoprostol (25 mcg every 4 hours) or vaginal misoprostol (25 mcg every 4 hours) until adequate labor contractions were achieved or a maximum of six doses. The primary outcome measure was the time from induction to delivery. Secondary outcomes included the mode of delivery, maternal and neonatal outcomes, and the incidence of adverse effects.

RESULTS:

The study included 102 participants, with 55 (53.9%) receiving oral misoprostol and 47 (46.1%) receiving vaginal misoprostol. The majority of participants were 25 years or younger, with 21 (35.0%) in the oral group and 30 (50.0%) in the vaginal group. The mean gestational age was similar between the oral (39.07 ± 0.76 weeks) and vaginal (38.85 ± 0.69 weeks) groups, with no significant difference ($p = 0.134$). Both systolic (SBP) and diastolic blood pressure (DBP) showed no significant differences (SBP $p = 0.073$, DBP $p = 0.219$). A slight but significant difference was observed, with the vaginal group having a marginally higher mean temperature (98.68 ± 0.13) compared to the oral group (98.61 ± 0.15), ($p = 0.001$). The Bishop score, which assesses cervical readiness for labor, showed no significant difference between the two groups ($p = 0.231$). Ultrasound findings (Amniotic Fluid Index) and hemoglobin levels showed no significant differences between the groups (AFI $p = 0.426$, Hemoglobin $p = 0.603$). Our study found no significant difference in the induction-to-delivery interval between the oral (9.65 ± 1.14 hours) and vaginal (9.93 ± 1.05 hours) groups ($p = 0.097$). The vaginal group required slightly more doses on average (2.17 ± 0.37) than the oral group (2.00 ± 0.00), with this difference being significant ($p = 0.002$). The APGAR scores of newborns were slightly higher in the oral group (8.30 ± 0.46) compared to the vaginal group (8.12 ± 0.61), though this difference was not statistically significant ($p = 0.139$).

CONCLUSION:

Our study has determined that both oral and vaginal misoprostol are effective for the induction of labor in women with term Prelabour rupture of membranes. These findings suggest that the choice of misoprostol administration route should be individualized based on patient characteristics and clinical circumstances. The overall safety and efficacy profiles support the use of either method based on clinical context and patient preferences.

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Madhumitha., Indu., Hiremath. Department of OBG,

BACKGROUND:

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Original title

"EFFICACY OF CARBETOCIN VERSUS OXYTOCIN IN THE CONTROL OF POSTPARTUM HEMORRHAGE- A COMPARATIVE STUDY".

Mithira Snegaa ,NR. Indu , Hiremath PB. Department of OBG,

BACKGROUND:

Postpartum hemorrhage (PPH) is a leading cause of maternal morbidity and mortality worldwide. Carbetocin and oxytocin are commonly used uterotonic agents for the prevention and treatment of PPH. This study aims to compare the efficacy of carbetocin versus oxytocin in the control of postpartum hemorrhage.

METHODS:

A total of 60 participants were enrolled in this comparative study and randomly assigned to two groups: Group C (carbetocin, n=30) and Group O (oxytocin, n=30). The demographic and clinical characteristics of the participants were recorded. The primary outcome measured was blood loss during the postpartum period. Secondary outcomes included the requirement for additional uterotonic agents, the need for blood transfusion, and adverse effects such as shivering and pyrexia.

RESULTS:

Sixty participants were randomly assigned to Group C (carbetocin, n=30) and Group O (oxytocin, n=30). Both groups were similar in age, contraceptive usage, and parity. There were no significant differences in weight, pulse rate, systolic blood pressure, and diastolic blood pressure between the groups, except DBP was lower in Group C ($p=0.001$). Hemoglobin and hematocrit levels were comparable pre- and post-delivery. Mean blood loss was 372.00 ± 220.14 ml in Group C and 377.50 ± 258.93 ml in Group O ($p=0.930$). Post-delivery pulse rate and respiratory rate were similar between groups. Blood transfusion needs and the use of other uterotonic agents were also comparable. Adverse effects like shivering and pyrexia showed no significant difference.

Carbetocin and oxytocin were equally effective in controlling postpartum hemorrhage, with carbetocin potentially offering more stable diastolic blood pressure, showed some greater advantage in post delivery Hemoglobin and hematocrit and its stability at room temperature. Further research with larger samples is recommended.

CONCLUSION:

Both carbetocin and oxytocin were equally effective in controlling postpartum hemorrhage, with no significant differences in the amount of blood loss, need for additional uterotonic agents, blood transfusion requirements, or adverse effects. However, carbetocin may offer a slight advantage in maintaining more stable diastolic blood pressure, maintaining post delivery Hemoglobin and hematocrit and its stability at room temperature has showed an additional advantage. Further research with larger sample sizes is warranted to confirm these findings and explore long-term outcomes.

Original title

“REFRACTIVE OUTCOMES FOLLOWING PTERYGIUM EXCISION WITH CONJUNCTIVAL LIMBAL AUTOGRAFT IN PRIMARY PTERYGIUM USING AUTOLOGOUS BLOOD A LONGITUDINAL STUDY”

Bezawada Navya Deepika , Loganathan , Swathi, Department of ophthalmology,

INTRODUCTION:

Pterygium is one of the most common ocular surface disorder. Successful pterygium surgery brings down the pterygium induced astigmatism and related vision loss. Multiple options are available for the management of pterygium. Amongst all the surgical options available, limbal conjunctival autograft using autologous blood is the most frequently practised method, as it is associated with least recurrence rate compared to other methods of managing the pterygium. The present study was conducted to find out and compare the preoperative and postoperative changes in the astigmatism and also to assess the visual outcome following pterygium excision. Demonstration of such association could serve as a standard for the indication to perform pterygium surgery to improve the patient's vision, as the induced corneal astigmatism may be reduced by timely management of pterygium.

METHODOLOGY :

This longitudinal observational study was conducted on 45 patients who have visited ophthalmology OPD and diagnosed with primary pterygium fulfilling the inclusion criteria were included in this study. Demographic details such as age, sex, occupation, socio-economic status, relevant systemic history and detailed ocular history were collected. All the study subjects underwent pterygium excision with conjunctival limbal auto graft using autologous blood in the affected eye and refractive outcomes were monitored.

RESULTS:

The study included subjects with a mean age of 48.64 years, ranging from 34 to 70 years. The gender distribution showed that 71.1% were males (32 individuals), while 28.9% were females (13 individuals). Additionally, a significant majority of subjects, 97.8% (44 individuals), belonged to the below poverty line category, with only 2.2% (1 individual) falling into the above poverty line category. The occupational distribution indicated that 53.3% (24 individuals) were farmers, and 33.3% (15 individuals) were daily wage workers. Prior to pterygium excision, 66.7% of the patients (30 individuals) had visual acuity between >6/60 and 6/12, with 8.9% (4 patients) having slightly better visual acuity (>6/12). Following surgery, the majority of the 45 patients experienced improvements in visual acuity as assessed by the Snellen chart. Significant improvements were observed in refractive outcomes post-operatively. There was a marked decrease in mean preoperative refractive cylinder power from $0.985D \pm 1.092$ to $0.257D \pm 1.282$ ($p \leq 0.002$), indicating substantial improvement in refractive astigmatism. However, the change in mean preoperative refractive spherical power from $0.257D \pm 2.48$ to $0.159D \pm 1.88$ post-operatively was not statistically significant ($p=0.2$).

CONCLUSION: This study concludes that timely surgical management of pterygium by excision with conjunctival limbal autograft using autologous blood, results in substantial improvement in astigmatism and overall visual outcomes

Original title**CORNEAL ENDOTHELIAL CELL CHANGES AMONG INDIVIDUALS WITH TYPE II DIABETES MELLITUS VERSUS NON-DIABETICS AFTER MANUAL SMALL INCISION CATARACT SURGERY- A LONGITUDINAL STUDY****Chandhini., Nagara Ashok Mahadevappa., Loganathan.** *Department of ophthalmology,***INTRODUCTION:**

Diabetes Mellitus (DM) is one of major cause of early onset cataract, so the incidence of these patients undergoing cataract surgery is high. Diabetic patients have abnormal corneal morphology along with higher rate of corneal endothelial cell loss and decreased corneal endothelial cell density. This study was conducted to assess and compare the endothelial cell changes among patients with type 2 diabetes mellitus versus non diabetics after manual small incision cataract surgery

MATERIALS AND METHODS:

This longitudinal study was conducted among 56 diabetic and 56 non diabetic patients undergoing manual small incision cataract surgery. Preoperative, postoperative day 3, 2 week and 4 week endothelial cell changes were assessed using specular microscopy and compared among both the groups. Data was analysed using SPSS version 21.

RESULTS:

Preoperative endothelial cell density (ECD) in diabetics was 2167.68 ± 272.7 and non-diabetics was 2375.63 ± 307.46 . ECD in diabetics on post operative week 4 in diabetics was 1794.54 ± 344.42 and in non-diabetics was 2046.07 ± 542.89 . The endothelial cell count showed progressive decrease in post-operative period in both the groups and it was more pronounced in the diabetic group when compared to the non-diabetic group which was statistically significant. The central corneal thickness was significantly higher in diabetic than compared to non-diabetic both preoperatively as well as post operatively. The coefficient of variance of cells was higher in diabetic patients both preoperatively and postoperatively across all time points than non-diabetics patients and it was not statistically significant. Hexagonal cell count was decreased in both groups but the reduction was higher among diabetics compared to non-diabetic patients and was not statistically significant

CONCLUSION:

The diabetic endothelium is at a higher risk of damage both pre and postoperatively. Hence, proper preoperative evaluation of corneal endothelium is essential before cataract surgery especially among diabetic patients.

Original title**GUIDANCE OF SIGHT: EMPOWERING DIABETICS WITH GLAUCOMA AWARENESS****Rakesh Madhivanan.,** *Department of ophthalmology,***BACKGROUND:**

Diabetes mellitus (DM) is a prevalent metabolic disorder characterized by hyperglycemia resulting from insulin secretion or action defects. Its global prevalence underscores its significance, with India ranking second highest in diabetes cases. Diabetic retinopathy (DR) and diabetic foot ulcers (DFUs) are debilitating complications of DM, with DR affecting 16.9% of individuals in India. DFUs, a consequence of impaired wound healing, pose serious risks, with a prevalence of 11.6% among diabetic patients. Aimed to estimate the prevalence of diabetic retinopathy in patients with and without diabetic foot ulcers, comparing their clinical characteristics and interrelationship.

MATERIAL & METHOD:

A cross-sectional observational study conducted over 18 months at Sri Venkateshwaraa Medical College Hospital and Research Centre. Visual acuity, anterior segment, and fundus evaluations were performed on 115 type 2 DM patients, with or without DFUs, using Snellen's chart, slit lamp biomicroscope, and dilated fundus examination. Data on demographics, medical history, and diabetic complications were collected. Results: Among participants, 57.4% were male, and 47% had retinopathy, with 57.4% presenting DFUs. Cigarette smoking was significantly higher among DFU patients (54.5%). DFU patients exhibited higher HbA1c levels and longer diabetes duration. Dry eye incidence was significantly higher in DFU patients (47%). Notably, retinopathy prevalence was significantly higher among DFU patients (78.8%), correlating with DFU severity.

CONCLUSION:

Our study underscores the high prevalence of diabetic complications among type 2 DM patients. Cigarette smoking emerged as a significant risk factor for DFUs, emphasizing the importance of lifestyle modifications. Additionally, glycemic control and disease management are critical in preventing complications, as evidenced by higher HbA1c levels and longer diabetes duration in DFU patients. The observed correlation between DFU severity and retinopathy grade highlights the interconnectedness of diabetic complications, necessitating tailored management strategies. Comprehensive approaches focusing on glycemic control and targeted interventions are imperative for mitigating the burden of diabetic complications and improving patient outcome

Original title

“Refractive outcomes following pterygium excision with conjunctival limbal autograft in primary pterygium using autologous blood a longitudinal study”

Bezawada Navya Deepika , Loganathan , Swathi, Department of ophthalmology,

INTRODUCTION:

Pterygium is one of the most common ocular surface disorder. Successful pterygium surgery brings down the pterygium induced astigmatism and related vision loss. Multiple options are available for the management of pterygium. Amongst all the surgical options available, limbal conjunctival autograft using autologous blood is the most frequently practised method, as it is associated with least recurrence rate compared to other methods of managing the pterygium. The present study was conducted to find out and compare the preoperative and postoperative changes in the astigmatism and also to assess the visual outcome following pterygium excision. Demonstration of such association could serve as a standard for the indication to perform pterygium surgery to improve the patient's vision, as the induced corneal astigmatism may be reduced by timely management of pterygium.

METHODOLOGY :

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RESULTS:

The study included subjects with a mean age of 48.64 years, ranging from 34 to 70 years. The gender distribution showed that 71.1% were males (32 individuals), while 28.9% were females (13 individuals). Additionally, a significant majority of subjects, 97.8% (44 individuals), belonged to the below poverty line category, with only 2.2% (1 individual) falling into the above poverty line category. The occupational distribution indicated that 53.3% (24 individuals) were farmers, and 33.3% (15 individuals) were daily wage workers. Prior to pterygium excision, 66.7% of the patients (30 individuals) had visual acuity between $>6/60$ and $6/12$, with 8.9% (4 patients) having slightly better visual acuity ($>6/12$). Following surgery, the majority of the 45 patients experienced improvements in visual acuity as assessed by the Snellen chart. Significant improvements were observed in refractive outcomes post-operatively. There was a marked decrease in mean preoperative refractive cylinder power from $0.985D \pm 1.092$ to $0.257D \pm 1.282$ ($p \leq 0.002$), indicating substantial improvement in refractive astigmatism. However, the change in mean preoperative refractive spherical power from $0.257D \pm 2.48$ to $0.159D \pm 1.88$ post-operatively was not statistically significant ($p=0.2$). Following pterygium excision, there was an observed increase in mean keratometric readings for the flatter axis or horizontal meridian from $42.91 \pm 2.466D$ to $43.42 \pm 2.050D$ over an 8-week period. This suggests an overall improvement in corneal curvature post-operatively.

CONCLUSION:

This study concludes that timely surgical management of pterygium by excision with conjunctival limbal autograft using autologous blood, results in substantial improvement in astigmatism and overall visual outcomes

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Original title

CLINICO RADIOLOGICAL OUTCOMES IN POSTERIOR LUMBAR INTERBODY USION IN DEGENERATIVE SPONDYLOLISTHESIS

Prithivi raj., karthick anand., Department of orthopaedics

BACKGROUND:

Degenerative Spondylolisthesis is a common degenerative condition characterized by the forward slippage of a vertebra in respect to the vertebra below it, but the connecting bone structure remains unaffected. This condition primarily affects females who are above the age of 40, namely at the L4-5 level. If adults do not experience improvement after undergoing 6 weeks of non-surgical treatment, it is recommended to consider surgical intervention as a potential solution for alleviating persistent and disruptive back pain or radicular discomfort, loss of nerve function, symptomatic grade III or higher slide, increasing deformity, and the development of cauda equina

OBJECTIVES:

primary objective :To determine the clinical outcome of posterior lumbar interbody fusion in patient with degeberative spondylolisthesis using JOA (Japenese Orthopaedic Association score) and ODI (oswertry low back pain disability index)and radiological assesement of fusion(modified bridwell criteria)Secondary objective To determine the effect of various factors like Age,Gender,Radiological finding and type of work predicting the successful outcomes of PLIF in degenerative spondylolisthesis .

MATERIALS AND METHODS:

The study was conducted at Sri Venkateshwaraa Medical College &Research Centre and included 40 patients with evaluate the clinical and radiological outcomes with Posterior Lumbar Interbody Fusion with degenerative spondylolisthesis who fit the inclusion criteria. It was a prospective study with patients followed up with a written informed consent and as per pro-forma from all patients.

RESULTS:

All 40 patients in this study reported experiencing back pain, sciatica, and neurogenic claudication.Post-operative improvements were significant ($P < 0.005$) across both studies, indicating the efficacy of surgical and therapeutic interventions in alleviating symptoms and enhancing patient outcomes. In our study, the Oswestry Disability Index (ODI) scores showed substantial improvement over time. The pre-operative mean ODI score of 28.91 decreased to 4.03 at one year post-operation, indicating significant functional improvement. Each time point comparison post-operation revealed significant reductions in ODI scores ($p < 0.001$), illustrating a continuous and progressive recovery in patients' functionality. the Japanese Orthopaedic Association (JOA) scores exhibited marked improvement, rising from a pre-operative mean of 8.72 to 16.36 at one year post-operation.

CONCLUSION:

In conclusion, this study underscores the efficacy of surgical interventions for spondylolisthesis, demonstrating significant improvements in patient outcomes over a one-year follow-up period..

Original title

Intra-Articular Platelet-Rich Plasma Injection for Pain and Functional Outcomes in Osteoarthritis Knee: A Prospective Cohort Study

Rumesh Kannan Gunasekaran., Manikandan ., Department of orthopaedics

BACKGROUND:

Osteoarthritis (OA) is a chronic degenerative disorder that causes significant morbidity, with limited treatment options available. Intra-articular platelet-rich plasma (PRP) injection has emerged as a promising treatment alternative. Notably, our hospital has been using PRP injections as a routine treatment for OA patients for the past four years. However, despite its long-standing use, the outcomes of this treatment have not been formally evaluated, prompting the need for this study.

METHODS:

This prospective cohort study evaluated the effectiveness of PRP injection in patients with moderate OA knee. Seventy-two patients received a single intra-articular injection of 8 ml of PRP, prepared from 60 ml of autologous venous blood. Outcome measures included Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) scores, Visual Analogue Scale (VAS) pain scores, International Knee Documentation Committee (IKDC) subjective knee evaluation scores, and 6-minute walking distance (6MWD) at 1, 3, and 6 months post-injection.

RESULTS:

Significant improvements in WOMAC scores for pain, stiffness, and physical function were observed at 1, 3, and 6 months post-injection. VAS pain scores, IKDC scores, and 6MWD also showed significant improvements. The results suggest that PRP injection provides sustained symptom relief up to 6 months post-treatment.

CONCLUSION:

This study demonstrates the potential benefits of intra-articular PRP injection as a treatment option for moderate OA knee. The findings support the use of PRP therapy as a safe and effective treatment for patients with OA knee, providing an alternative to traditional treatments.

KEYWORDS:

Osteoarthritis, Platelet-rich plasma (PRP), knees, intra-articular injection, functional

Original title

A STUDY OF PREVALENCE OF HYPERTENSION IN PRE-ADOLESCENT OBESE AND OVERWEIGHT CHILDREN OF AGE 6-10 YEARS IN A TERTIARY CARE HOSPITAL - CROSS -SECTIONAL STUDY

Anupriya ., kulandaivel. Department of Pediatrics

OBJECTIVES:

To estimate the prevalence of hypertension among pre-adolescent obese and overweight children of age 6-10 years of age.

METHODOLOGY:

Research Question :

IS OBESITY AND HYPERTENSION AMONG INDIAN PRE- ADOLESCENT CHILDREN INCREASING?

Study Design : Cross-sectional observational study

Study Setting : Pediatric OPD In Sri Venkateshwara Medical College

Study Period : November 2022 – March 2024

Study Subjects : Children of 6-10 years attending Pediatric OPD will be screened for inclusion into the study. Children satisfying the inclusion criteria will be enrolled after taking informed consent from parents/primary caregivers and assent from the child wherever applicable. Inclusion Criteria :Children of 6-10 years with who attend OPD.

Exclusion criteria

<6 years and >10 years

Children with syndromes associated with obesity

.Known case of nephritic syndrome

Refusal to give consent. SAMPLE SIZE: 112

RESULTS:

As a result of this study, distribution of blood pressure stages according to IAP classification is elevated blood pressure showed 16%, normotensive showed 79%, stage I hypertension 15% and there were no second stage hypertension.

CONCLUSION:

In conclusion, this study highlights the multifactorial nature of hypertension in pre-adolescent children, driven many associated factors. Regular blood pressure screenings, weight management programs, dietary education, addressing a comprehensive approach to improving cardiovascular health and resulting in reducing the prevalence of hypertension and enhancing the overall well-being of children.

Original title**EFFECT OF CAP ON PHOTOTHERAPY INDUCED HYPOCALCEMIA IN TERM & PRETERM NEONATES > 35 WEEKS- A COMPARATIVE STUDY****Venkata sirisha pendem ., sathish kumar ., Department of ophthalmology,****OBJECTIVES:**

To find the effect of head covering on serum calcium levels in neonates receiving phototherapy. To determine the rate of reduction of serum bilirubin while headcovering in place

METHODOLOGY:

Study Design: This was a rct, open labelled , parallel comparative clinical trial aimed at evaluating the effect of head covering on serum calcium levels in term and late preterm neonates receiving phototherapy for hyperbilirubinemia. **Study Population:** The study population included term and late preterm neonates (gestational age > 35 weeks) born in Venkateswara medical college , during study population . **Study Period:** November 2022 to November 2023. **Inclusion Criteria:** Neonates > 35 weeks requiring phototherapy as per AAP nomogram guidelines. **Exclusion Criteria:** Neonates with birth asphyxia. Neonates on intravenous or respiratory support. Neonates with conjugated hyperbilirubinemia. Neonates requiring exchange transfusion. Neonates with congenital malformations. Infants born to diabetic mothers. Neonates whose guardians did not consent to participate. **sample Size Calculation:** A total of 60 neonates were included in the study.

RESULTS:

In our study we did not find any significant difference in the incidence of hypocalcemia between two 2 groups. Serum albumin levels showed no significant differences between the groups before and after treatment, indicating treatment did not significantly affect serum albumin levels. However, both total and indirect bilirubin levels exhibited significant decreases post-treatment in both groups, while direct bilirubin levels did not change significantly, suggesting treatment primarily affects total and indirect bilirubin levels. Serum calcium in the head covered group actually increased after phototherapy when compared to the serum calcium level before starting treatment, though the difference is not statistically significant(47). Serum calcium levels reduced than before starting phototherapy in the control group but the difference is not significant.

CONCLUSION:

After phototherapy the mean serum calcium levels in the intervention group increased whereas they declined in the control group though it was not statistically significant. Further, this head covering will not affect the reduction of bilirubin levels during phototherapy. It is recommended to do large sample size trial including preterm babies for a definitive evidence for using head covering in all babies undergoing phototherapy to prevent hypocalcemia.

Original title

SONOGRAPHIC EVALUATION OF THYROID LESIONS BASED ON TIRADS SCORING SYSTEM AND ELASTOGRAPHY WITH FNAC CORRELATION

Saranraj., Nirmal Kumar Gopalakrishnan., Rajarajan S, Kalaivani @ Selvi.,

Department of Pediatrics

BACKGROUND AND AIMS:

Thyroid nodules are common clinical entities that manifest as discrete lesions within the thyroid gland, distinguishable from the surrounding tissue on radiological examination. Their significance in medical practice stems from their potential malignancy, necessitating precise and effective diagnostic strategies. Sonographic evaluation, particularly using the Thyroid Imaging Reporting and Data System (TIRADS) and elastography, has evolved as a critical approach in the assessment and management of these nodules. This study aims to evaluate the diagnostic accuracy and clinical utility of these imaging techniques in conjunction with Fine-Needle Aspiration Cytology (FNAC) for the comprehensive assessment of thyroid lesions

PRIMARY OBJECTIVE:

To determine the Diagnostic accuracy of TIRADS and Shear wave Elastography in Differentiating Benign and Malignant Thyroid Nodules Using Fine Needle Aspiration Cytology as the reference standard.

MATERIALS AND METHODS:

Patients with clinically detected or suspected thyroid lesions underwent an ultrasound examination using the Mindray Resona i9 system. Lesions were evaluated and classified according to the Thyroid Imaging Reporting and Data System (TIRADS), and their elasticity was assessed using elastography to help differentiate benign from potentially malignant nodules. Each finding was thoroughly documented, and appropriate clinical recommendations were made based on the ultrasound results. Fine Needle Aspiration Cytology (FNAC) was also performed to further evaluate the lesions identified during the ultrasound. The FNAC was executed under ultrasound guidance using either a 23- or 27-gauge needle, depending on the requirements determined by the lesion's characteristics. Samples were immediately processed and classified using the Bethesda System for Reporting Thyroid Cytopathology.

RESULTS:

In our study, the sensitivity and specificity of TIRADS were 87.06% and 88.89%, respectively, while elastography demonstrated a high sensitivity of 91.76% and specificity of 88.89%. These findings align with some aspects of existing literature but also highlight some minor differences.

CONCLUSION:

The findings of our study highlight the clinical relevance of using TIRADS and elastography in conjunction with FNAC. This comprehensive diagnostic strategy enhances risk stratification, improves diagnostic confidence, reduces unnecessary interventions, and guides clinical decision-making. By implementing this integrated evaluation framework, clinicians can provide more accurate, efficient, and patient-centered care, leading to better management and outcomes for patients with thyroid nodules.

Original title

COHORT STUDY OF DIAGNOSTIC LAPAROSCOPY TO EVALUATE THE APPENDICULAR PATHOLOGY IN UNEXPLAINED CHRONIC RIGHT ILIAC FOSSA PAIN

MAILABBAI MOHAMMED AFFAN., VINAYAGAM. *Department of General Surgery.*

BACKGROUND :

Chronic Right Iliac Fossa (RIF) pain poses a significant diagnostic challenge due to its multifactorial etiology and complex symptomatology, often involving a spectrum of abdominal and pelvic pathologies. Traditional imaging modalities may not always comprehensively elucidate the underlying causes, underscoring the need for a meticulous and direct diagnostic approach. In this context, diagnostic laparoscopy has emerged as a promising tool to directly visualize intra-abdominal structures, allowing for timely identification of occult pathologies

MATERIAL & METHODS:

The study was a prospective cohort study Patients presenting with chronic pain in the right iliac fossa who attended the surgical OPD and were admitted to the surgery ward within the study period were included. Their symptoms and signs were recorded, followed by routine laboratory tests and imaging modalities; findings from these were also documented, including ultrasound (USG) of the abdomen which did not reveal any pathology, and blood investigations which returned normal results. Participants willing to undergo diagnostic laparoscopy were categorized into the study group, while those opting against surgery were placed in the control group. The study group's intraoperative findings, various appendicular pathology findings, and clinical improvements over a six-month follow-up were documented. Meanwhile, the clinical improvement of the control group under conservative management was recorded during the follow-up period. The effectiveness of laparoscopic appendectomy in addressing unexplained right iliac fossa (RIF) pain was compared between the study and control groups.. Ethical clearance was obtained before the start of the study (SRC No: REF- SVMC/S-RC/2022/23/CTR716 and IEC No: 12/SVMCH/IEC-Cert/Oct22). 100 samples size was calculated for the study.

RESULTS :

The prevalence of nausea (58.6%) and universal reporting of RIF pain and tenderness (100%) in our cohort underscores a pattern that may guide clinicians towards considering laparoscopy earlier in the diagnostic process. The low rates of wound infection (9.3%) and leaks (1.3%) emphasize the safety and cleanliness of the surgical procedure and postoperative care.

CONCLUSION:

The study on diagnostic laparoscopy in young adults with chronic unexplained right iliac fossa (RIF) pain highlights the influence of demographic factors, symptomatology, diagnostic findings, and nutritional status on surgical outcomes and patient management. The research underscores the benefits of early laparoscopic exploration, the need to refine surgical techniques and postoperative care to reduce complications, and the importance of routine preoperative nutritional

Original title

PROSPECTIVE STUDY ON THE EFFECTIVENESS OF ENHANCED RECOVERY AFTER SURGERY (ERAS) PROTOCOLS FOR ELECTIVE LAPAROTOMY IN A TERTIARY HOSPITAL

Manek Markose Roy., K Selvakumar., Chandraleela Department of General Surgery.

BACKGROUND :

Surgical interventions, while often necessary for diagnosing and treating a myriad of conditions, inherently subject patients to physiological stress, postoperative pain, and extended periods of recovery. Traditional care models have typically accepted prolonged hospital stays and slow recoveries as standard. However, with the advent of Enhanced Recovery After Surgery (ERAS) protocols, this paradigm is shifting towards a more patient-centered approach that emphasizes reducing surgical stress, minimizing postoperative complications, and facilitating quicker recoveries

MATERIAL & METHODS:

The study was a prospective study mainly comparing the outcomes of patients undergoing ERAS protocols for recovery with those undergoing conventional method of recovery in the Department of General Surgery, SVMCH. Ethical clearance was obtained before the start of the study (SRC No: REF-SVMC/SRC/2022/24/CTR767 and IEC No: 27/SVMCH/IEC-Cert/Oct22). 60 samples size was calculated for the study. The protocol included various steps such as preoperative counselling, optimizing nutrition, standardizing analgesia without opioid use, minimizing electrolyte imbalance, reducing fluid imbalance, using minimally invasive approaches, promoting early ambulation and feeding, and appropriate thromboprophylaxis. Performa was prepared for the same and the data was in-to to entered into excel sheet. 2 follow-up visits were scheduled for data completion.

RESULTS:

45% of the participants were ambulated on post-operative day 0 itself and about 58.3% participants were started on oral intake on post-operative day1, indicating an earlier recovery with ERAS protocols . In about 43.3% drain were avoided and also for those participants with drain , earlier removal was promoted. The effectiveness of the Fast Track Surgery protocols can be seen in here as 31.07% participants had their bowel movement on the 2nd post-operative day and about 46.70% participants were discharged on post-operative day 2 itself. There were No post-operative complications to 90% participants which is noteworthy, adding to the strength of ERAS protocols post operatively

CONCLUSION:

The findings of this study contribute to the growing body of evidence supporting the enefits of ERAS protocols in elective abdominal procedures. The study's results align with previous research, emphasizing the effectiveness of ERAS in reducing hospital stays, post-operative complications, and readmission rates

Original title**A COMPARATIVE STUDY OF RAPID UREASE TEST AND HISTOPATHOLOGICAL EXAMINATION IN THE DETECTION OF H.PYLORI INFECTION IN CHRONIC GASTRITIS PATIENTS****Lakeen.,Muthukumar..** Department of General Surgery.**BACKGROUND :**

Finding an H. pylori infection is essential for diagnosing and managing chronic gastritis as well as for preventing its consequences. The identification of H. pylori infection can now be done using a variety of diagnostic techniques, including non-invasive ones like urea breath tests, stool antigen tests, and serology, as well as invasive ones like rapid urease tests (RUT), culture, endoscopic biopsy followed by histopathological examination, and molecular assays. pylori is present in stomach mucosal biopsies.

MATERIALS & METHODS:

The study population consisted of patients with complaints of dyspepsia for more than 6 months who presented to the General Surgery department at Sri Venkateswaraa Medical College Hospital and Research Centre (SVMCH & RC). This sample size was calculated based on a 95% confidence interval, a prevalence rate of 36%, and an acceptable margin of error of 5%.The study area included the General Surgery department, encompassing the Outpatient Department (OPD), Male Surgical Ward (MSW), Female Surgical Ward (FSW), and the Emergency Ward. The study was conducted over a period of 12 months, from August 2022 to August 2023.

RESULTS:

The diagnostic accuracy of the RUT, compared to HPE as the reference standard, was evaluated using sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and overall accuracy. RUT demonstrated high sensitivity (93.81%), indicating its effectiveness in correctly identifying patients with H. pylori infection. The specificity of RUT was 100%, meaning it accurately identified all patients who did not have the infection. The PPV of RUT was 100%, confirming that all patients who tested positive via RUT were indeed infected with H. pylori. The NPV was 68.42%, suggesting that a negative RUT result still leaves a considerable probability of infection, necessitating further confirmation by HPE. The overall accuracy of RUT was 102.82%, an indicator of its robustness as a diagnostic method.

CONCLUSION:

My study findings are consistent with existing literature, confirming the reliability and diagnostic accuracy of RUT and HPE in diagnosing H. pylori infection. The associations found between clinical symptoms and H. pylori infection in our study align with those reported in other studies, reinforcing the robustness of these diagnostic methods and the typical clinical presentations of H. pylori infection. The high prevalence of antral gastritis and the significant association between heartburn and H. pylori infection highlight the importance of considering these factors in clinical practice. The significant diagnostic value of RUT further underscores its utility as a rapid and effective tool for diagnosing H. pylori infection in various clinical settings.

Original title

PREVALENCE OF METABOLIC SYNDROME IN PATIENTS WITH NEOPLASTIC BREAST PATHOLOGY – A CROSS SECTIONAL STUDY

Raasiga., Selvakumar., Department of General Surgery.

BACKGROUND :

The association between Metabolic Syndrome and breast cancer has been the subject of several research that have sought to examine the relative contributions of the different components of MS to the risk of developing breast cancer.

OBJECTIVES

To estimate the prevalence of metabolic syndrome in patients with neoplastic breast pathology [benign and malignant]. To establish its role as an independent factor on occurrence of breast cancer.

MATERIALS AND METHODS :

Study design: Cross sectional study study population : 60 subjects affected by neoplastic breast pathology [group a], proven by histopathological examination 60 subjects with no breast pathology [group b]; sample size : 120 women calculated using open epi version 3 prevalence – 40 % confidence interval – 95% margin of error – 9%. Sample design : purposive sampling period of study – 18 months [august 2022- february 2024]

inclusion criteria : women aged 18 years affected by neoplastic breast pathology.

RESULTS:

MS prevalence was significantly higher among postmenopausal women with breast cancer [40%] compared to healthy women [18%]. Our study reveals significant associations between metabolic syndrome components and breast cancer risk among women. The age distribution shows a concentration in the 31-40 years range [24.2%], with the majority having a normal BMI [66.7%]. However, metabolic abnormalities were prevalent: 20.0% had hypertension, 25.8% had diabetes mellitus, and 21.7% had a WHR>0.80.

CONCLUSIONS:

The Prevalence of Metabolic Syndrome was found to be significantly higher in patients with malignant breast disease. From this study, Metabolic Syndrome may be considered as an individual risk factor for neoplastic breast diseases.

Individuals with Metabolic Syndrome should be under constant surveillance for breast cancer This will help in early detection and treatment and hence will lead to a good prognosis.

Original title

AN OBSERVATIONAL STUDY OF FOUR LAYERED COMPRESSION DRESSINGS IN THE MANAGEMENT OF VENOUS LEG ULCERS IN A TERTIARY CARE CENTER AT PUDUCHERRY
Sanjai., Muthukumar ., Chandraleela Department of General Surgery.

BACKGROUND :

Venous leg ulcers (VLU) are a major clinical challenge and the result of chronic venous insufficiency (CVI) and venous hypertension. They manifest on the lower limb and represent between 60% and 80% of all leg ulcerations. People with VLUs often report having reduced health-related quality of life because these wounds can be painful, malodorous, and exuding.

MATERIALS & METHODS:

This was a prospective observational study conducted in the Department of Surgery in SVMCH, Puducherry. Ethical clearance was obtained before the start of the study. (SRC number: Ref: SVMC/S-RC/2022/23/CTR 713 dated 25/07/2022 and IEC: No:39/SVMCH/IEC-Cert/Mar 22 dated 26/08/22). 60 samples were considered for the study. Written consent from every patient was taken from all the study subjects. The patient was prospectively included with chronic venous ulcers or lower limbs of different severity for 4 layers. A compressive bandage using a Velfour bandage was used. A proforma was used to pool data, having detailed history, local examination of wound compressive therapy in the form of 4 layers, and the bandage was applied to intake subjects. Follow-up of the wound was made in OPD at intervals of 2 weeks. The area of ulcer reduced following therapy is noted. The modified Gilman Index formula was calculated using the below formula.
$$GI = \frac{SI - SF}{CF + CI} \times 100$$

RESULTS:

31 males and 29 females, were included in the study. The area of ulcers before therapy among males was 24.12 plus or minus 10.21 and the area of ulcers before therapy in females was 19.34 or 8.23. The area of ulcer after therapy in males was 0.34 or 2.1 and the area of ulcer after therapy in females was 0.21 or 3.1. The area of ulcers before therapy among the healed group was 22.23 plus or 8.32 and after therapy, among the healed group was 0.29 plus or 5.2 which is statistically significant between them. With P less than, 0.05

CONCLUSION:

To conclude, our findings suggest that, four-layered compression dressings are effective in treating venous leg ulcers.

Original title

**'A Randomized Control Trial On Effectiveness Of Quilting Method In Ventral Hernia And It's Outcome In A Tertiary Care Hospital
Swaathi., Selvakumar., Indrajit., Department of General Surgery.**

BACKGROUND :

Among the innovative techniques for ventral hernia repair, the quilting method has garnered considerable interest. This method involves anchoring the mesh to the fascia at multiple points, thereby distributing tension more evenly and reducing the potential for dead space, which is often a precursor to seroma formation. The quilting method is thought to offer several advantages over traditional techniques, including lower rates of postoperative complications, such as seromas, infections, and chronic pain. Additionally, it may facilitate quicker patient recovery and reduce the length of hospital stay, contributing to overall improved patient outcomes

MATERIAL & METHODS:

The study was a Randomized Control Trial where the patients were divided into two groups with one group treated with quilting method and the other group traditional method in the Department of General Surgery, SVMCH. Ethical clearance was obtained before the start of the study (SRC No: REF-SVMC/SRC/2022/23/CTR718 and IEC No: 20/SVMCH/IEC-Cert/Aug22). 74 samples size was calculated for the study and each group with 37 participants . The following data were collected Details of participants, including disease characteristics, Details of the type of intervention, Details of outcomes reported. Patients admitted for ventral hernia repair were divided into two groups based on the last digit of their IP number Group 1: Patients whose last digit of their IP number was odd received quilting sutures Group 2: Patients whose last digit of their IP number was even did not receive quilting sutures.

RESULTS:

Wound healing, assessed through wound scores on days 1, 3, 7, and 14, showed significant improvements in the quilting group. Particularly by Day 3, the quilting group had lower wound scores, indicating better healing. The reduction in wound infection rates in the quilting group (28.8%) compared to the non-quilting group (45.2%) is statistically significant ($p = 0.009$). Only 13.7% of patients in the quilting group experienced wound dehiscence compared to 86.3% in the non-quilting group. Patients treated with the quilting method had a significantly shorter hospital stay (8.80 ± 1.89 days) compared to those without quilting (14.60 ± 5.97 days). The earlier removal of drains in the quilting group (mean of 7.42 days) compared to the non-quilting group (mean of 10.50 days) is another positive outcome

Conclusion:

This study robustly demonstrates that the quilting method in ventral hernia repair significantly improves patient outcomes by reducing seroma formation, wound infection, and hospital stay duration. These findings are consistent with existing literature, reinforcing the quilting method as an effective technique for enhancing recovery and minimizing postoperative complications

Original title

SERUM CHOLESTEROL LEVEL AS PREDICTOR FOR SURGICAL SITE INFECTION IN ELECTIVE GENERAL SURGICAL PROCEDURES - A PROSPECTIVE OBSERVATIONAL STUDY

Yojitha sharatha ., Venkatesh., Department of General Surgery.

BACKGROUND :

- To calculate the incidence of surgical site infection in elective general surgical procedures.
- To find out whether total serum cholesterol level is a reliable and independent predictor for surgical site infection.
- To compare the incidence of surgical site infection in hypercholesterolemia and hypocholesterolemia patients.

STUDY DESIGN

Prospective observational COHORT study with sample size 236, purposive sampling done. All patients admitted to SVMCH& RC, Pondicherry for elective general surgical procedures.

METHODOLOGY:

All the patients willing to participate are included in the study. Descriptive data will be collected from the patients with regards to age, sex, socio-economic status, diagnosis, investigations, procedure and post op follow up SURGICAL SITE INFECTION scoring will be done according to SOUTH-HAMPTON's scoring system. Post-operatively patients will be monitored up to 1month. Incidence of SURGICAL SITE INFECTION will be compared to total serum cholesterol levels in each patient. DATA COLLECTED IN PRE-VALIDATED PROFORMA WHICH IS ENCLOSED.

RESULTS:

The majority of participants(87.8%) reported no symptoms, while others reported fever (3.3%), swelling over sutures (1.1%), pain (2.2%), and discharge (5.6%). Most participants exhibited no symptoms on POD-3(81.1%) and POD-7(84.4%). Notable were the cases with grade 3A symptoms (5.6%) on both days, indicative of moderate infections. Participants with low cholesterol levels on POD-3 showed no significant difference in mean cholesterol levels between those with absent SSIs (128.35 mg/dL) and those with present SSIs (128.30 mg/dL), with a P-value of 1.000 indicating no statistical significance. Similarly, on POD-7, the mean cholesterol levels for participants without SSIs were 126.80 mg/dL, while those with SSIs had a mean of 131.40 mg/dL (P=0.454). By the 2nd week, the mean cholesterol level for participants without SSIs was 127.33 mg/dL, compared to 137.33 mg/dL for those with SSIs, with a P-value of 0.239, indicating no significant difference.

CONCLUSION:

This study provides compelling evidence that serum cholesterol levels are significantly associated with the incidence of surgical site infections (SSIs). Specifically, the findings highlight that patients with low serum cholesterol levels tend to have a higher risk of developing SSIs,. Conversely, higher cholesterol levels did not consistently correlate with increased SSIs, indicating a more nuanced relationship.

Original title

"PRE OPERATIVE SERUM ALBUMIN AND BODY MASS INDEX AS PREDICTORS OF POSTOPERATIVE OUTCOME IN ELECTIVE ABDOMINAL SURGERY"

Lochan., Venkatesh., Department of General Surgery.

BACKGROUND :

In Surgical interventions, especially elective abdominal surgeries are intrinsically complex, with a wide range of patient-specific factors influencing the final result. Among them, the ability to predict postoperative outcomes has drawn attention to the nutritional and metabolic status of patients, which is frequently captured by metrics like blood albumin levels and Body Mass Index (BMI). There is a dearth of research on the combined predictive value of serum albumin and BMI in elective abdominal procedures, despite their proven significance as independent predictors of surgical outcomes. This gap is a chance to advance a more comprehensive comprehension of preoperative assessments. Second, finding trustworthy indicators of postoperative outcomes is critical given the growing focus on patient-centered care and personalised medicine. The goal of this study is to maximise the potential of these indicators to customise preoperative interventions and improve surgical outcomes by concentrating on elective abdominal procedures, where patients have the benefit of having extensive preoperative evaluations.

OBJECTIVES:

This study's main objective is to evaluate body mass index and preoperative serum albumin as indicators of postoperative morbidity and death in elective abdominal operations. Aim: To assess preoperative serum albumin and Body Mass Index as predictors of postoperative morbidity and mortality in elective abdominal surgeries

MATERIALS & METHODS:

Study design :Hospital Based Observation Study; Study population : Patients admitted in the department of General Surgery, Sample size : Sample size- 75,calculated using open epi version 3.Confidence interval-95%; Power-80% Margin of error-5%; Standard deviation-0.15;Study duration : 12 months; sampling technique: purposive sampling;

RESULTS:

Serum albumin has been validated as a crucial marker for predicting postoperative complications, reflecting an individual's nutritional status and being highly indicative of morbidity and mortality. In our study of 75 patients, lower serum albumin levels (<3 g/dL) were significantly associated with higher complication rates, while levels above 3.5 g/dL corresponded with fewer complications, regardless of disease pathology. Additionally, underweight patients (BMI <18.5 kg/m²) faced significantly more complications, highlighting the importance of addressing nutritional deficiencies preoperatively

CONCLUSIONS:

Despite no significant gender differences in complication rates, the specific disease process also played a critical role. These findings underscore the necessity for routine nutritional assessments, with serum albumin as a cost-effective, widely performed test, to identify at-risk patients and improve surgical outcomes through comprehensive preoperative evaluations.

Original title

TITLE AN ANALYSIS OF PRE-OPERATIVE INDICATORS FOR EMERGENCY LAPAROSCOPIC APPENDICECTOMY CONVERSION TO OPEN SURGERY

Vimalraj., Venkatesh Department of General Surgery.

BACKGROUND :

Acute appendicitis, recognized as one of the most common surgical emergencies, has an estimated lifetime incidence of acute appendicitis, one of the most common surgical emergencies, is approximately 8%.. In the setting of acute appendicitis, this study aims to discover and evaluate preoperative markers that could indicate when an open appendicectomy should be performed instead of a laparoscopic one. By doing this, it hopes to increase the quality of care given to patients having surgery for acute appendicitis, optimise surgical decisionmaking procedures, and strengthen the effectiveness of patient management techniques .

OBJECTIVES:

To determine the incidence of patient to undergo conversion of Emergency laparoscopic appendicectomy into Oper Appendicectomy • To assess the Pre-operative indicators for Conversion of surgery (S. Bilirubin and Total Leukocyte Count) • To evaluate the expenditure for laparoscopic converted to open appendicectomy against the usual expenditure for open appendicectomy

METHODS:

study design : longitudinal- analytical study.. study population: patients who are admitted for emergency laparoscopic appendicectomy .eligibility criteria inclusion criteri: • patients having an emergencylaparoscopic appendicectomy after being diagnosed with acute appendicitis. Exclusion criteri: patients undergoing surgery where appendicectomy was part of another procedure like a right hemicolectomy an excluded from the study. . patients undergoing interval appendicectomy are excluded from the study. paediatrics patients

RESULTS:

Study participant's Laparoscopic appendicectomy surgery had 6.027 times the odds of serum bilirubin <1.2 when compared with study participant's Converted to open surgery surgery had serum bilirubin <1.2 and the association was statistically highly significant (p value =<0.0001).

CONCLUSION :

In conclusion, understanding and utilizing preoperative indicators can greatly improve the management of acute appendicitis, allowing for more precise surgical planning and better patient outcomes. The findings of this study contribute to the growing body of evidence supporting the use of serum bilirubin and Total leukocyte count as key predictors for conversion from laparoscopic to open appendicectomy in emergency settings

Original title

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Original title

Evaluation of residual pleuro-parenchymal changes and lung function impairment in treated pulmonary and pleural tuberculosis patients – A longitudinal study

Gadusatla Shivani ., Varghese Zachariah., Kalaiyarasan., Rajarajan.,

Department of Respiratory medicine

BACKGROUND :

Mycobacterium Tuberculosis, an acid-fast bacilli, causes granulomatous illness known as pulmonary tuberculosis. Sputum microscopy, culture sensitivity, chest x-ray, cartridge-based nucleic acid amplification test, and Line Probe Assay are commonly used in diagnosis. Despite adequate treatment, pulmonary TB can result in long term sequelae, including a loss in total lung capacity due to scar fibrosis. The study aim is to evaluation residual pleuro-parenchymal changes and lung function impairment in treated pulmonary and pleural tuberculosis patients

METHODS :

Patients who had completed treatment for pulmonary tuberculosis/pleural tuberculosis clinical history, dyspnoea grading by mMrc score, high resolution chest computed tomography (HRCT), and spirometry were done for forced vital capacity (FVC), forced expiratory volume in 1 second (FEV1), and FEV1/FVC. Patients DLCO and 6MWT were recorded. HRCT scans were evaluated based on the number of pulmonary segments involved in the most common sequelae (fibrosis and bronchiectasis). Semi-quantitative analysis was done for these abnormalities.

RESULTS :

The study included 50 patients who had previously undergone treatment for pulmonary and pleural TB. Grade 2 dyspnoea seen in 30/50 patients. Right upper lobe fibrosis seen in 29/50 individuals, whereas 28/50 had right upper lobe bronchiectasis, with the most common number of pulmonary segments involved being 9-10. Obstruction was the most common spirometry abnormality in 54% of cases. The most common DLco impairment was moderate in 34% of patients and 44% of patients walk a distance of 351-450 metres. There was no statistically significant correlation between PFT and the number of pulmonary segments affected. However, there was significant association between the severity of lung function and 6MWD.

CONCLUSION :

Our study did not find correlation between post-tubercular sequelae evident on CT thorax and the extent of severity of lung function impairment. Instead, extent of severity in lung function impairment was correlated only with the 6-minute walk distance.

Original title

COMPARISON OF CLINICAL SYMPTOMS, LUNG FUNCTION IMPAIRMENT AND INFLAMMATORY MARKERS IN OBESE VERSUS NON - OBESE COPD PATIENTS - A CROSS - SECTIONAL STUDY

Dr.KANIVATHANI. P, DR. VARGHESE ZACHARIAH, KALAIYARASAN. K,Dr. BASKARAN. S

Department of Respiratory medicine

Background & Aims : COPD is the third leading cause of death worldwide, clinicians need to be aware of comorbidities in patients with COPD, which may have an impact on morbidity & mortality. Our aim was to compare severity of symptoms, lung function impairment, inflammatory markers, need for inhalational therapy in obese vs non-obese COPD patients.

Methods: Around 60 COPD patients of which 30 obese and 30 non obese patients with risk factors, signs & symptoms of COPD were recruited and detailed history and clinical examination were done and COPD were diagnosed by spirometry and the severity was assessed. mMRC grading, CAT score and BODE index were noted. 6 Minute Walk Test(6MWT) & ECHO was performed followed by which CBC and CRP were also done.

Results:

- 1.The obese group has a significantly lower 6 -MWD compared to non - obese COPD group which was statistically significant
- 2.More number of hospital admission was in obese group which was statistically significant.
- 3.The majority of patients with severe COPD (51.7%) and very severe COPD (60%) belong to the obese group which was not statistically significant
- 4.Difference in severity of dyspnea, CAT score, mean BODE index & the prevalence of PAH among the groups is not statistically significant.
- 5.FEV1/FVC ratio was higher in the obese group which was statistically insignificant
- 6.Although both groups have CRP levels above the normal range, statistical difference was not observed.

Descriptive statistics on the lung function factors

Lung Function Parameters (Post-BD)	Group	N	Mean	Std. Deviation	't' statistic	'p' value
FEV1	Non-obese	30	1.14	0.42	1.303	0.198
	Obese	30	0.99	0.47		
FEV1 (%)	Non-obese	30	50.66	19.41	1.163	0.250
	Obese	30	45.00	18.30		
FVC	Non-obese	30	1.90	0.58	1.738	0.088
	Obese	30	1.61	0.69		
FVC (%)	Non-obese	30	64.93	21.09	1.358	0.180
	Obese	30	57.73	19.96		
FEV1/FVC	Non-obese	30	8.35	20.22	-1.053	0.297
	Obese	30	14.71	26.17		
FEV1/FVC %	Non-obese	30	78.56	16.25	0.411	0.683
	Obese	30	77.00	13.13		

Conclusion:

The findings of the study were not statistically correlated to previously published studies which state that obese COPD patients had a worse symptom course, poorer spirometry compared to non - obese COPD patients.

Original title

TO ESTIMATE THE LEVEL OF SERUM URIC ACID IN CORRELATION WITH CLINICAL FINDING IN STROKE PATIENTS USING NATIONAL INSTITUTE OF HEALTH STROKE SCALE.

Sharan.,PrabhuGnanasekaran, Department of General Medicine,

BACKGROUND :

The second leading cause of death worldwide is stroke. It is a major global source of disability and accounts for 11% of all deaths. The byproduct of purine and protein metabolism is uric acid, which is primarily eliminated from the body through the urine and is a poorly soluble substance. The direct contribution of hyperuricemia to the development of atherosclerosis is one theory as to how it raises CV risk. Many prospective studies have examined the association between blood uric acid levels and the frequency of stroke during the past few decades, but the findings have been inconsistent. Hence, the present study is intended to estimate serum Uric acid levels and its correlation with clinical findings in stroke patients.

OBJECTIVES :

To Correlate serum uric acid level with severity of Stroke.

To assess the shorter clinical outcomes in stroke patients with serum uric acid levels.

MATERIALS AND METHODS :

The study is a Cross Sectional study with a sample size of 118. Stroke patients who are more than 40 years of age attending Department of General Medicine, SVMCH were included in the study using Convenient sampling method. A semi structured Questionnaire was used to collect data from the patients and SPSS 23.0 was used to analyze the data.

RESULTS :

In the study, 30.5% of the patients belong to the age group of 51 to 60 years, 24.6% of the age group 61 to 70 years, 22.9% of the age group 41 to 50 years, 11.9% of the patients are above 70 years and 10.2% are below 40 years of age. 63.6% of the patients in the study group are male and 36.4% are female. The NIHSS of the patients with normal Uric acid level is 3.943 ± 0.9334 whereas NIHSS of the patients with elevated levels of Uric acid is 19.000 ± 5.1275 . There is a significant difference in the NIHSS score based on level of Uric acid. In the present study, 51.7% of the patients have mild level of stroke, 5.9% have mild to moderately severe stroke, 30.5% have severe stroke, 10.2% have very severe stroke and 1.7% have been intubated or have other physical barrier. 100% of the patients who had mild stroke and mild to moderately severe stroke had normal uric acid level. 100% of the patients who had severe stroke had elevated levels of uric acid. 91.6% of the patients who had severe stroke had elevated levels of Uric acid. There is a significant association between Uric acid level and severity of stroke.

CONCLUSION :

There is a strong correlation between the Uric Acid level and the Severity of Stroke as per the present study. Although there is no significant difference in the Uric acid level based on gender, there is a significant difference in the uric acid level based on age. The NIHSS also differs significantly in patients with normal uric acid level and in patients with elevated uric acid level. From the present study, there is strong evidence that Uric acid can be used as Biomarker to predict the outcome of the Stroke. Hence, it is suggested to measure Uric acid level and utilize it to predict the outcome of the Stroke.

Original title

A STUDY OF SERUM TESTOSTERONE LEVELS IN TYPE 2 DIABETIC AND NON DIABETIC MALES IN A TERTIARY CARE CENTRE IN PUDUCHERRY

Aravindan.,Suresh, Department of General Medicine,

Background :

Testosterone is important for not only the development but also the maintenance of reproductive tissues. There is a subtle, least dealt interrelationship between testosterone levels and type II DM which is a dealt via this study.

OBJECTIVES :

To estimate and compare the levels of Serum total testosterone in type 2 Diabetic and non-diabetic males

To correlate Serum total testosterone levels with their glycemic status.

MATERIALS AND METHODS:

Type of study : Cross Sectional comparative study involving male Diabetic and Non Diabetic males above 18 years of age.

Duration of study : one year duration from January 2023 to Jan 2024.

Study population: 40 Diabetic and 40 Non diabetic males were selected for the study excluding the persons with pre existing Endocrine disorders, chronic renal failure, trauma to genitals, mumps and liver failure.

RESULTS :

The mean serum testosterone level among the participants in the type II DM and non-diabetic group was 350.94 ± 141.96 ng/dl and 461.67 ± 171.24 ng/dl, respectively. The mean serum testosterone level among participants in the diabetic group was significantly lower than those in the non-diabetic group alongside significant hypogonadism features as per ADAM questionnaire in Diabetic males as compared with non diabetic counterparts with P value of less than 0.05.

CONCLUSION :

The serum testosterone levels were negatively correlated with fasting blood sugar, post prandial blood sugar and HbA1C levels, respectively.

Original title

A STUDY OF SERUM LIPID PROFILE AMONG DIFFERENT BODY MASS INDEX CATEGORY IN DIABETES MELLITUS AND NON-DIABETES MELLITUS IN TERTIARY CARE CENTRE

Arun Kumar., Shaik Anwar Hussain., Department of General Medicine,

BACKGROUND:

Around 77 million individuals >18 years are experiencing diabetes (type 2) in India. Obesity and dyslipidemia have a shared pathophysiology linked to "insulin resistance". Only very limited research works are available on Diabetes with its relation to BMI and Dyslipidemia. Hence this study was planned to identify the correlation between the lipid profile and different Body Mass index categories among Diabetes Mellitus in tertiary care centre. . Also to detect the dyslipidemia among them which could improve the preventive measures in Diabetes to avoid further complications

METHODS:

This Hospital based cross sectional study was done among 194 patients. blood samples were collected for FBS, PPBS and Serum Lipid Profile. Results were collected and entered in Microsoft Excel sheet then analysis was done using SPSS version 23.0. SRC approval number - SVMC/SRC/2022/23/CTR 727 IEC approval number - 45/SVMCH/IEC - Cert/Aug22

RESULTS:

Majority of patients 79 (40.8%) were in the age group of 40-60 years. There were 122 (62.9%) Males and 72 (37.1%) Females. Out of 194 patients 112 (57.7%) of them are Diabetic. About 54 (27.8%) patients are Overweight and 48 (24.7%) are Obese. It reveals that there is significant difference in the lipid profile among Diabetic and Non-Diabetic patients. as BMI increases the Lipid profile (TC, LDL, VLDL & TG) also increases showing a Positive Correlation and there is Negative correlation between BMI and HDL (R value = -0.459) that is as BMI increases HDL decreases

CONCLUSION:

This study reveals that higher serum levels of Total cholesterol, Triglycerides, Low density lipoprotein, Very Low-Density Lipoprotein, Low level of HDL was noted among Diabetes patient compared to non-diabetic patients. The chances of dyslipidemia increase in patients with type 2 diabetes with high BMI in our study.

KEYWORDS: Diabetes, Dyslipidemia, Body Mass Index

Original title**ESTIMATION OF LIPID PROFILE AMONG HYPOTHYROIDISM PATIENTS ATTENDING OPD IN A TERTIARY CARE CENTRE AT PUDUCHERRY"****Bharath., Kasipandian.,** Department of General Medicine,**BACKGROUND:**

Overt hypothyroidism is relatively common disorder in general population. Thyroid hormone plays an important role in regulating the synthesis, metabolism and mobilization of lipids. In patients with overt hypothyroidism, there is an increase in serum total cholesterol, low density lipoprotein. Cholesterol, triglyceride levels which may predispose to the development of atherosclerotic disease. Hence it is essential to evaluate the lipid profile of patients diagnosed with hypothyroidism to analyze the extent of derangement of lipid parameters and treat the patients accordingly to prevent complications and mortality.

MATERIALS AND METHODS :

A total of 71 study patients aged 18 years above with known case of hypothyroidism attending outpatient department of General Medicine department, were included in the study by convenient sampling. All the patients in the present study were interviewed personally for basic socio-demographic details, clinical details using a standardized questionnaire and then blood investigations was performed. The data was entered in a Microsoft excel sheet and analyzed by using Epi-info software version 7.2.2.6. SRC APPROVAL NUMBER SVMCH/SRC/2022/23/CTR731 IEC APPROVAL NUMBER SVMCH/IEC-CERT/OCT22

RESULTS :

In this study, 80.3% had overt hypothyroidism and only 19.7% with sub-clinical hypothyroidism. The mean plasma levels of total cholesterol, triglycerides, high-density lipoproteins, low-density lipoproteins and very low-density lipoproteins were 196.1 ± 38.4 mg/dl, 165.5 ± 42.8 mg/dl, 31.5 ± 11.0 mg/dl, 133.8 ± 36.5 mg/dl and 35.9 ± 6.28 mg/dl respectively. The dyslipidemia among hypothyroid subjects was found to be as, hypercholesterolemia (16.9%), hypertriglyceridemia (23.9%), low HDL (100.0%), high LDL (38.0%) and high VLDL (70.4%).

CONCLUSION :

In this study, dyslipidemia among hypothyroid subjects was found to be higher for HDL and VLDL. Diabetes and Hypertension were found to be most common comorbidities. CKD patients were found to have higher lipid and thyroid parameters when compared to other comorbidities. High lipid (except TC) and high thyroid (except FT3) parameters observed for overweight and obese hypothyroid subjects.

Original title

INCIDENCE OF THYROID ABNORMALITIES IN TYPE 2 DIABETES MELLITUS AND ITS CORRELATION WITH GLYCEMIC CONTROL

Kondugari Mrudula Theresa, Ponnambalam. Department of General Medicine,

BACKGROUND:

Thyroid dysfunction can also worsen preclinical diabetes mellitus and cause hyperglycemia, which raises the risk of complications from the disease. As a result, diabetes mellitus and thyroid problems coexist and are two of the main endocrinopathies that are frequently seen in adults. Hence, the present study aims to study the influence of Thyroid abnormalities in T2DM and its influence with Glycaemic control.

OBJECTIVES:

To estimate the thyroid hormone levels in Type 2 Diabetes Mellitus.

To study the correlation between Diabetes mellitus and Thyroid dysfunction by estimating Free T3, Free T4, Thyroid stimulating hormone (TSH) levels in type 2 diabetes patients. To assess the difference in the incidence of thyroid dysfunction between male & female patients with Type 2 Diabetes Mellitus. To determine the prevalence and degree of various Thyroid dysfunction between Type 2 Diabetes Mellitus patients.

MATERIALS AND METHODS :

The study is a Cross Sectional study with a sample size of 88. All patients with Type 2 Diabetes mellitus above the age of 18 years presenting to SVMCH&RC and are willing to participate in the study were included irrespective of gender. Fasting venous sample of 5ml was drawn and estimation of thyroid profile levels like Thyroid stimulating hormone (TSH), Free T3 (FT3), Free T4 (FT4) using CLIA (chemiluminescence immunoassay) and Glycosylated hemoglobin (HbA1c), Fasting blood sugar (FBS), Post prandial blood sugar (PPBS) by TINIA (Turbidimetric inhibition immunoassay) and Hexokinase method respectively was performed

RESULTS:

In the present study, 76.1% of the Diabetic Patients have normal thyroid profile in the present study. However, 13.6% of the Diabetic Patients in the study have Overt Hypothyroidism, 6.8% have Subclinical Hypothyroidism, 2.3% have Subclinical Hyperthyroidism and 1.1% have Overt Hyperthyroidism. The average TSH levels in the Diabetic patients is 3.45352 ± 2.96755 mU/L with a minimum of 0.08 mU/L and a maximum of 11.60 mU/L. The mean T3 levels in the Diabetic patients is 2.9443 ± 0.92834 pg/ml with a minimum of 0.30 pg/ml and a maximum of 4.30 pg/ml. Similarly, the mean T4 levels in the Diabetic patients is 1.1614 ± 0.38310 ng/dl with a minimum of 0.30 ng/dl and a maximum of 2.70 ng/dl. There is a significant positive correlation between HbA1c levels and TSH

CONCLUSION:

The study of thyroid abnormalities in individuals with Type 2 Diabetes Mellitus (T2DM) reveals a significant relationship between these two endocrine disorders. This study backs up the idea that people with type 2 diabetes should have regular thyroid function screenings since treating thyroid

Original title**CLINICAL CHARACTERISTICS OF ADMITTED HEART FAILURE PATIENTS WITH PRESERVED, MID-RANGE, AND REDUCED EJECTION FRACTION****Mouhamed Nazar., Ponnambalam.,** Department of General Medicine,**BACKGROUND:**

Heart failure (HF) is a clinical syndrome in which patients have typical symptoms and signs resulting from an abnormality of cardiac structure, function, or both. Heart failure (HF) is a global pandemic affecting approximately 64.3 million people worldwide; The HF burden in India is also alarming. Hence the aim of this study is to describe the clinical characteristics of hospitalized patients with heart failure (HF); to identify precipitating factors for hospitalization and to find risk factors related to each HF subtype.

MATERIAL AND METHODS:

The present study was cross sectional study carried out among admitted heart failure patients more than 18 years. The data was collected in a semi structured questionnaire after informed consent. Statistical analysis was done using descriptive statistics.

RESULTS:

Out of 240 hospitalized heart failure patients, 147 (61.25%) had HFrEF (<40% ejection fraction), 45 (18.75%) had HFmrEF (41-49% ejection fraction), and 48 (20.0%) had HFpEF (>50% ejection fraction). The mean age in the study population was 61.59±11.78 years. In the study, 140 (58.3%) patients were male and 100 (41.7%) were female. In the HFrEF group, age distribution was uniform across the fourth to eighth decades with no gender predominance. In HFmrEF, males were predominant (68.9%) with a peak in the fifth decade, decreasing through the eighth decade; HFpEF showed a female predominance with peak ages in the sixth decade. Diabetes, hypertension and CAD were most common risk factors. Drug non-compliance was prevalent in 42.1% of the heart failure patients, predominantly in HFrEF (48.3%). Dietary non-compliance, mainly excessive salt or fluid intake, affected 37.5% of the population, with a higher prevalence in HFrEF. Acute coronary syndrome (27.5%) was the third most common precipitating factor, followed by acute infections (21.3%).

CONCLUSION:

This heart failure registry provides clinical characterization of admitted heart failure patients classified by heart failure subtypes. There were significant differences among each heart failure subgroups when compared to other Indian cohorts. Our study gives an opportunity to improve the care for heart failure patients and increase awareness of modifiable risk factors and precipitating factors for hospital admission.

Original title

A STUDY OF PREVALENCE OF NON ALCOHOLIC FATTY LIVER DISEASE AMONG DIABETES AND PREDIABETIC PATIENTS IN TERTIARY CARE CENTER

Renil kumar., Suresh., Department of General Medicine,

BACKGROUND:

Non-alcoholic fatty liver is the commonest cause of liver dysfunction in the western world. Nonalcoholic fatty liver disease generally is an incidental diagnosis during routine investigations. As a result of which many patient presents later in the course of the disease which increases the morbidity to the patient. Since India has a high prevalence of diabetes, it is necessary to estimate the prevalence if the South Indian population, of which there is little research done. This study will also show the importance of screening of diabetic individuals for Nonalcoholic fatty liver disease.

METHODS:

This Hospital based cross sectional study was done among 144 patients. Diabetic patients with no history of alcohol intake will be screened for NAFLD using ultrasonography and blood investigations (FBS, PPBS, HBA1c and LFT) will be sent. Results were collected and entered in Microsoft Excel sheet then analysis was done using SPSS version 23.0. SRC approval number - SVMC/SRC/2022/23/CTR 724 IEC approval number - 07/SVMCH/IEC - Cert/Aug22

RESULTS:

28.2% of the Diabetic patients have grade 0 fatty liver, 26.5% of the Diabetic patients have grade 1 fatty liver, 26.5% of the Diabetic patients have grade 2 fatty liver and 18.8% of the Diabetic patients have grade 3 fatty liver. 44.4% of the Pre-Diabetic patients have grade 0 fatty liver, 29.6% of the Pre-Diabetic patients have grade 1 fatty liver, 14.8% of the Pre-Diabetic patients have grade 2 fatty liver and 11.1% of the Pre-Diabetic patients have grade 3 fatty liver. It reveals that there is a highly significant association between duration of Diabetes and grade of Fatty liver. There is a highly significant association between fatty liver and liver fibrosis. There is a highly significant association between BMI and grade of fatty liver.

CONCLUSION:

This study reveals that individuals with type II diabetes mellitus are more likely than the general population to develop non-alcoholic fatty liver disease (NAFLD). An analysis of the risk factors for non-alcoholic fatty liver disease (NAFLD) found that individuals with NAFLD had greater rates of obesity, hypertension, hyperlipidemia, hyperglycemia, and sedentary lifestyles.

Original title**“CORRELATION OF LEFT VENTRICULAR DIASTOLIC DYSFUNCTION WITH GLYCEMIC PARAMETERS IN TYPE 2 DIABETES MELLITUS”****Revathy, Shaik Anwar Hussain.** Department of General Medicine,**BACKGROUND:**

Diabetes mellitus is a chronic metabolic disease and is characterized by hyperglycaemic state associated with microvascular and macrovascular complications. The inability of the heart muscles to relax and stretch in order to accommodate the venous return is defined as 'diastolic dysfunction'. The characteristic feature of diabetic cardiomyopathy is the cardiac hypertrophy. Though initially compensatory, the cardiomyopathy shall lead to heart failure or stroke and even sudden death.

OBJECTIVES :

To estimate the prevalence of Diastolic Dysfunction in type 2 Diabetes Mellitus. To assess the correlation of Left ventricular Diastolic Dysfunction with Glycaemic parameters in type 2 Diabetes Mellitus .

MATERIAL AND METHODS:

A Cross sectional comparative study was conducted in the Department of General Medicine, Cardiology and diabetology at Sri Venkateshwara Medical College Hospital and Research Centre, Puducherry for 1 year (October 2022 to September 2023). Patients above 18 years of age both male and female fulfilling the ADA criteria were included in this study after getting informed written consent. Pretested semi structured questionnaire was used to collect data regarding the sociodemographic and details of the past history. Following which clinical examination was done. Blood sample was taken for biochemical analysis and all participants was made to undergo echocardiogram with doppler study.

RESULTS :

The mean age among the participants was 53.23 ± 9.45 years. 56% were males and 44% were females with 52% were overweight and 18% were obese. Among the participants, 41% had diastolic dysfunction of grade I followed by 38% with diastolic dysfunction of grade II and 12% had grade III diastolic dysfunction. Among the participants with grade 1, grade 2 and grade 3 dysfunction, 26.9%, 34.2% and 58.4% had duration of more than 10 years respectively with 38% had HbA1C between 6 to 6.9% followed by 16% with HbA1C values 7 to 7.9%, the mean HbA1C was $7.54 \pm 1.81\%$. The mean fasting, post prandial and HbA1C values were higher for participants with grade III diastolic dysfunction than those with grade II, grade I with significant p value of < 0.05 . The proportion of participants with Diabetic complications increased with increase in grades of diastolic dysfunction.

CONCLUSION :

Type II diabetes was associated with the occurrence of diastolic dysfunction. With increase in duration of diabetes the probability of diastolic dysfunction also gets increased. Glycaemic control was also very vital as any variable indicating poor glycaemic control like elevated fasting and post prandial blood sugar levels, irregular treatment and elevated HbA1C levels were all found to be associated with higher grades of diastolic dysfunction.

Original title**A STUDY OF CLINICAL AND LABORATORY PROFILE OF URINARY TRACT INFECTION IN DIABETIC AND NON DIABETIC PATIENTS****Saranya., Suresh.,** Department of General Medicine,**BACKGROUND:**

Diabetes mellitus has been considered a growing health problem in today's world, and the incidence of diabetes mellitus was found to have increased in the recent decades of life. Patients with diabetes mellitus have an increased development of infections compared to non-diabetic patients. Among the various infections, the urinary tract infection is the most common infection among diabetic patients, and if left untreated or undertreated, it leads to the development of life-threatening complications.

METHODS :

This prospective cross-sectional study was conducted in the Department of General Medicine, Sri Venkateshwaraa Medical College Hospital and Research Centre, Ariyur, Puducherry. The study was conducted for 18 Months, from October 2022 to March 2024. All the patients were subjected to proper history taking, examination, and laboratory blood investigations followed by urine microscopy and culture.

RESULTS :

A total of 126 patients with the symptoms of urinary tract infection participated in the study. The mean age of the patients was 46.99 + 11.70 years. The females contribute to 65.9% of the total study population. The study showed a statistically significant association with the socio-economic status ($p < 0.001$), occupation ($p = 0.009$), body mass index ($p < 0.001$), dysuria ($p < 0.001$), abdominal pain ($p < 0.001$), vomiting ($p = 0.005$), hematuria ($p = 0.011$), pyuria ($p = 0.017$), incontinence ($p < 0.001$), retention of urine ($p = 0.002$), Pyelonephritis ($p = 0.008$). However, none of the predisposing factors showed a significant association with the diabetic status of the patient. E.coli is the most commonly isolated organism from diabetic and nondiabetic populations. Pseudomonas growth was higher in non-diabetic patients compared to diabetic patients. Meropenem is the most sensitive drug for both diabetic and non diabetic patients.

CONCLUSION :

All diabetic patients should be screened for urinary tract infections once in a while, and prompt treatment should be initiated in patients with urinary tract infections to prevent the development of life-threatening complications.

Original title

ASSESSMENT OF NON-HIGH-DENSITY LIPOPROTEIN CHOLESTEROL AS A RISK FACTOR IN ISCHEMIC STROKE

Dangudubiyam S S R K Pavan ., Prabhu Gnanasekaran, Department of General Medicine,

BACKGROUND:

Stroke, which includes hemorrhagic and ischemic strokes, affects 13.7 million people worldwide annually and is the second largest cause of mortality, accounting for 5.5 million fatalities. Over 80 million people worldwide have survived a stroke, with an estimated 1 in 4 individuals having one at some point in their lives. Non-HDL-C has become widely used and is regarded as a crucial therapeutic objective in addition to a biomarker with clinical relevance. Thus, the present study aims at understanding non-HDL-C as a risk factor for Ischemic Stroke.

AIM AND OBJECTIVES:

To measure non-HDL-Cholesterol levels in Ischemic Stroke. To assess the levels of non-HDL-Cholesterol and to establish non-HDL-Cholesterol as an individual risk factor for Ischemic Stroke.

MATERIALS AND METHODS:

This is a cross-sectional study conducted with a sample size of 164 for a period of 18 months. Patients diagnosed as Ischemic Stroke based on the clinical evaluation, CT Brain, MRI Brain (if needed) and above the age 45 years were included in the study. Patients under the age of 45 years, and patients with known secondary cause for Stroke, patients diagnosed as haemorrhagic stroke, traumatic stroke and thrombo-embolic stroke, patients on lipid lowering drugs and patients not willing for the study were excluded. Fasting venous sample of 5ml was drawn and lipid profile levels like Total Cholesterol (TC), Triglycerides (TGL), Low Density Lipoprotein Cholesterol (LDL-C) and High-Density Lipoprotein Cholesterol (HDL-C) were performed in the biochemistry laboratory of SVMCH&RC. Non-HDL-C was calculated by using the formula

RESULTS:

In the present study, 56.7% of the patients are male and 43.3% are female. Majority of the patients (41.5%) are obese, 36.6% are overweight and 22% are normal based on BMI. The mean age of the patients in the study is 60.890 ± 11.0031 years with a range of 46-94 years. Majority of the patients with normal LDL (85.5%) have normal level of Non-HDL. But, 14.5% of the Patients with normal LDL have elevated non-HDL. Majority of the patients with Border line high LDL (91.7%) have elevated Non-HDL. But, 8.3% of the Patients with Border line high LDL have normal non-HDL. All the patients with high LDL (100%) have elevated Non-HDL.

CONCLUSION:

It was concluded that there is a strong correlation between raised non-HDL-C levels and a higher chance of having an ischemic stroke. As per the study, it is suggested that incorporating non-HDL-C screening into standard clinical care can enhance public health outcomes and lead to more successful stroke prevention measures.

Original title**A STUDY ON COMPARISON BETWEEN FASTING AND RANDOM LIPID LEVELS IN TYPE 2 DIABETES MELLITUS IN A TERTIARY CARE CENTRE****Sathiya Sai Kiruba., Kasipandian.,** Department of General Medicine,**BACKGROUND:**

Diabetes Mellitus is a chronic disorder of metabolism characterised by hyperglycemia. It is due to impaired insulin secretion or due to the peripheral action of the insulin or occurs due to both mechanisms. The increased prevalence of cardiovascular disability (CVD) among patients with Type 2 Diabetes Mellitus is because of the prolonged and exaggerated postprandial dysmetabolism and primarily due to the dysmetabolism of hyperglycemia and hypertriglyceridemia which causes endothelial dysfunction and oxidative stress. People with normal or near-normal triglyceridemia tend to have elevated triglyceride levels in the postprandial state.

AIM :

To compare fasting and random lipid levels in patients with Diabetes Mellitus and find if there is any significance in doing a lipid profile in the fasting state.

METHODS :

This Case-Control study was conducted in the Department of General Medicine, a tertiary care centre in Puducherry. A total of 110 cases and 110 controls were participated in the study. Fasting lipid profiles were taken after 8 hours of overnight fasting whereas the random lipid sample was taken after 2 hours of fixed breakfast meal.

RESULTS:

The mean age of the patients in the case group was found to be 48.34 + 9.96 years, and the mean age in the control group was 48.62 + 10.39 years. On comparing the fasting lipid parameters between the diabetics and non-diabetics, there was a significant difference noted between triglycerides ($p < 0.001$), LDL-C ($p < 0.001$), VLDL-C ($p < 0.001$), HDL ($p < 0.001$) and total cholesterol ($p < 0.001$). On comparing the random lipid parameters between the diabetics and non-diabetics, there was a significant difference noted between triglycerides ($p < 0.001$), LDL-C ($p < 0.001$), VLDL-C ($p < 0.001$), HDL ($p < 0.001$) and total cholesterol ($p < 0.001$). All the lipid profile parameters in both the fasting and the random sample were higher in diabetics and non-diabetics, except the HDL-C levels in the blood. And on comparing the difference between the fasting and the random lipid parameters in diabetics, there was a significant difference noted between triglycerides ($p < 0.001$) only and the other parameters such as LDL-C (0.392), VLDL-C ($p = 0.384$), HDL ($p = 0.440$) and Total cholesterol ($p = 0.403$) did not show much difference..

CONCLUSION :

The study recommends a random lipid profile as a potential alternative to the fasting lipid profile and clinicians can also prefer a random lipid profile over a fasting lipid profile in patients with diabetic dyslipidemia. However, it needs further study with a larger proportion to ensure the above finding.

Original title**A MORPHOLOGICAL AND MORPHOMETRIC STUDY OF JUGULAR FORAMEN IN DRY SKULLS AND 3D RECONSTRUCTED COMPUTERISED TOMOGRAPHIC IMAGES OF SKULLS IN PUDUCHERRY- A CROSS-SECTIONAL STUDY****Bharathivelan., Malar., Rajarajan., Department of Anatomy****BACKGROUND AND AIMS:**

The morphology of the human skull exhibits considerable individual variation. The Jugular Foramen, a complex nexus of neurovascular structures at the skull base, often becomes the focus of clinical attention due to anomalies such as jugular bulb irregularities, glomus jugulare tumors, schwannomas, metastatic lesions, and infiltrative inflammatory processes. A thorough understanding of Jugular Foramen anatomy is essential for achieving successful surgical outcomes in this technically demanding region. While various studies have conducted morphometric analyses of this foramen in dry skulls, translating these findings to computed tomographic (CT) images of human skulls is even more advantageous, as it provides insights into the relationships between critical structures in living patients. This study investigates the morphology and morphometry of the Jugular Foramen using both dry skulls and 3D reconstructed CT images, highlighting their variations.

MATERIALS AND METHODS:

This study examined 100 dry skulls (50 male and 50 female) and 200 CT images of adult human skulls (100 male and 100 female), all from individuals over 25 years old. The morphometry of the jugular foramen and its topographical relationships with bony landmarks in dry skulls were measured using a digital sliding vernier caliper. For the CT images, measurements were conducted using RadiAnt DICOM software. Data were recorded in Microsoft Excel and analyzed using SPSS version 23, with measurements taken separately for the left and right sides.

RESULTS:

The jugular foramen is predominantly alembic in shape in both dry skulls and CT images, with 94% of dry skulls and 98% of CT images on the right side, and 94% of dry skulls and 96% of CT images on the left side displaying this shape. On the right side, 69% of dry skulls and 76% of CT images lack a septum, while 12% of dry skulls and 10% of CT images have a complete septum. The remaining skulls exhibit an incomplete septum. On the left side, 75% of dry skulls and 81.5% of CT images lack a septum, with 8% of dry skulls and 7% of CT images having a complete septum, and the rest showing an incomplete septum. Oval shapes are less common, appearing in 6% of dry skulls and 4% of CT images on both sides.

CONCLUSION:

A comprehensive exploration of the morphology and morphometry of the jugular foramen in both dry skulls and 3D reconstructed computerized tomography images has been meticulously examined. This invaluable investigation provides essential insights into the diverse array of metric and non-metric parameters, shedding light on their variations. Such profound understanding serves as an indispensable resource for neurosurgeons and physicians, empowering them to strategize and execute procedures involving the intricate base of the skull with unparalleled precision and confidence.

Original title

PREVALENCE OF PROTEIN ENERGY UNDER NUTRITION AND SELECTED MICRONUTRIENT DEFICIENCY MANIFESTATIONS AMONG SCHOOL CHILDREN IN ARIYUR, PUDUCHERRY- A CROSS-SECTIONAL STUDY"

Arunan., Thamizhmathi., Bharathalakshmi, Department of community medicine.,

INTRODUCTION:

Nutritional deficiencies in India contributed to about 0.5% of all deaths. India is the largest contributor of undernourished people in the world with around 14.37% of its population not receiving enough nutrition. Many of these deficiencies are preventable through nutrition education and healthy diet.

OBJECTIVE:

Among school going children in a selected school of Puducherry, To determine the prevalence of protein energy undernutrition and specific micronutrient deficiency, To assess the risk factors associated with protein energy undernutrition and specific micronutrient deficiency

MATERIALS AND METHODS:

This is an cross sectional study conducted among school going children studying in 7th to 10th standard in a private and a government high school in Ariyur, Pondicherry from November 2023 to January 2024. With 428 participants, anthropometric measurements and head to toe examination were recorded.

RESULTS:

Among 428 participants, 28.7%, 15.2%, 11.4%, 0.7%, 13.1%, 1.9%, 0.7%, 1.4%, 9.6%, 9.6% 53% has Anemia, Riboflavin deficiency, vitamin C, Iodine, Fluoride excess, Fluoride deficiency, Zinc, Calcium and Essential fatty acids respectively. It was found that risk factor like recent infection, hand wash and sex were statistically significant for causing micronutrient deficiency.

Among 428 participants, 25.5%, 33.6% and 8.4% were mild, moderately and severely stunted respectively. It was note that height for age was statistically significant with Sex and age (p value < 0.05).

CONCLUSION:

The study would enable us to understand the prevalence of undernutrition among Puducherry's school-aged children. We will be able to spot undernutrition in this population and launch targeted actions to deal with it.

KEY WORDS:

Deficiency, undernutrition, anemia

Original title**A STUDY OF COMPARISON BETWEEN CONVENTIONAL FLUID CYTOLOGY AND MANUAL LIQUID BASED CYTOLOGY IN A TERTIARY CARE HOSPITAL, PUDUCHERRY****Anbarasi. Kalaivani@selvi., Jonathan Arnold, Department of Pathology,****INTRODUCTION:**

The introduction of liquid-based preparatory techniques has enabled the enrichment of cells in the preparations, reducing the presence of inflammatory cells and blood. This method presents cells in a uniform monolayer, facilitating the identification of malignant cells. Most comparative studies between Conventional Smear (CS) and Liquid-Based Cytology (LBC) have focused on gynecological specimens, with limited research on body fluids. Additionally, automated LBC methods often require costly processing systems, which may be unaffordable in low-resource settings. With this background, we conducted this study to evaluate the manual liquid-based cytology (MLBC) using Eziprep Non-Gyn/Cytology Processing Kit, and compare its effectiveness with CS preparations on body fluids.

METHODOLOGY:

We assessed fluid samples obtained from clinical wards and received at our laboratory, totalling 97 samples that met the inclusion criteria. Smears were prepared from all 97 samples using both conventional techniques and the MLBC method. This Comparative analysis includes 5 parameters such as cell distribution, cellularity/cell yield, cellular overlapping, cytomorphology, and background. The interpretation was performed by faculties who were not involved in the study during routine cytology reporting to prevent biased results and was reviewed by the investigators for final opinion.

RESULTS:

The manual Liquid-Based Cytology (LBC) method showed statistically significant differences in four parameters, except cytomorphology. The significant findings included cell distribution ($p < 0.000$), cell yield/cellularity ($p < 0.001$), cellular overlapping ($p < 0.000$), and a cleaner background ($p < 0.001$). No statistically significant difference was observed in cytomorphology (p -value=0.649). Conventional method is more sensitive (93.33%) with lower specificity of 97.56%, and has a higher NPV of 98.77% compared to MLBC, while the manual LBC method excels in specificity of 98.77%, with low sensitivity value of 87.50% and has a higher PPV of 93.33%.

CONCLUSION:

In our study, it is evident that Manual Liquid-Based Cytology (MLBC) is superior in terms of clear background, uniform cell distribution, better cellularity with minimal overlapping. However, in view of cytomorphology features, it is not superior compared to conventional smears (CS) which plays crucial role in diagnosis especially in suspicious cases. Despite this, MLBC remains a cost-effective strategy in resource-limited settings. Despite its advantages such as reduced monolayer smear, less screen time, improved cell distribution, increased cellularity, minimized overlapping, and clearer background, LBC does not necessarily outperform conventional cytology in aiding the diagnosis. Consequently, conventional cytology remains the standard procedure. However, LBC could serve as an adjunctive method, complementing conventional cytology in certain scenarios. Adequate training of personnel in sample collection, manual preparation, screening, and interpretation yields superior outcomes.

Original title**CLINICAL PROFILE, TREATMENT PATTERN AND QUALITY OF LIFE AMONG THE ACNE VULGARIS PATIENTS IN A TERTIARY CARE TEACHING HOSPITAL****Nageswari ., Mangalarkkarasi., Department of Pharmacology****INTRODUCTION:**

Acne vulgaris is the common skin lesion observed in the clinical practice. It is a chronic inflammatory disease of pilosebaceous glands characterised by comedones, papules, pustules, nodules, cysts & in some cases scars and keloids that often persists for lifetime. Drug usage pattern studies in a particular disease condition in a hospital setting helps in analysing rational use of drugs. This hospital based observational study was conducted to provide an overview of the disease, pattern of antiacne medications prescribed using WHO core drug prescribing indicators and Quality of Life among Acne vulgaris patients using CADI scores.

MATERIALS AND METHODS:

This hospital based cross-sectional study was conducted among 100 Acne vulgaris (AV) patients for one year from November 2022 to October 2023. Demographic data, clinical characteristics, risk factors, management pattern, pattern of drug utilization and Quality of life assessment were collected. The data was analysed using (SPSS) software package for Windows, version 29.0. Continuous variables were expressed as Mean and Standard deviation. Categorical variables were expressed as Frequency and Percentages. Chi square test and Spearman correlation was performed to assess the relationship between demographic details, risk factors, GAGS and CADI variables in Acne vulgaris. The level of significance was set at P value < 0.05.

RESULTS:

The mean age of the Acne vulgaris patients was 33.3 years. Females were predominant (72%) than the males (28%). The most common risk factors found were high glycaemic diet (72%). The most common clinical presentation in distribution of Acne was present over cheeks (83) and 34% of patients presented with Papules. Chi-square analysis showed that Gender was associated with CADI Score and statistically significant with p-value (0.000). Around 81% of the patients received Polytherapy. Around 20.8% of patients received topical antibiotics, 19.3% oral antibiotics, 8.4% topical retinoids, 2.3% oral retinoids, 25% received skin care products. Spearman correlation shown that higher the BMI, higher the Quality of Life is affected and when duration of lesion is longer, Quality of Life is reduced as per CADI Score. And also, patients with seborrheic dermatitis showed significant correlation with GAGS Severity by Spearman correlation. As per the WHO core drug prescribing indicators, the average number of drugs per encounter was 2.12 and the drugs prescribed by generic name was 58.49%. The percentage of encounters with antibiotics 72%. The drugs prescribed from WHO essential drug list was 12.73%

CONCLUSION:

The present study expressed that Acne were common with high glycaemic diet, seborrheic dermatitis, cosmetic use. Topical & oral Antibiotics and Retinoids, Skin care products were the commonly prescribed drugs as per NICE guidelines. Polypharmacy, Generic prescription was moderate, drugs prescribed from EDL were less and antibiotics utilization was high as per WHO recommendation.

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Original title

Comparison of the positional accuracy in multiple implants by splinting With BD impress and pattern resin in open tray impression technique - An in vitro study

Dr.Sandhosh Gnanavel, Dr.Balaji Jayachandran, Dr Varsha Murthy, Dr Vidhya, Dr Lakshmi, Dr Sadish

BACKGROUND:

Dental Prosthesis misfit in multiple implants is often encountered and can be corrected through impression techniques in producing an accurate, passively fitting prosthesis and ensuring maximum precision. Splinting multiple implants with a rigid and dimensionally stable can be a wise choice. Therefore, an in-vitro study was designed to compare the dimensional stability of Pattern resin and BD Impress as splinting material on the positional accuracy in multiple implants by open tray implant impression technique.

AIM:

The aim of the study was to evaluate and compare the positional accuracy in multiple implants by splinting with pattern resin and BD Impress.

MATERIALS AND METHODS:

An epoxy resin model was fabricated into which four implants were placed. The open tray copings were attached and splinting was done with pattern resin in Group I (n=6) and with BD Impress in Group II (n=6). Six open tray impressions were made with vinyl polysiloxane and analogs were attached. The casts retrieved from each group were analysed for the positional accuracy using Vision Measuring Machine (VMM). The mean values of all the measurements for each group were obtained and they were statistically analysed using unpaired t test at a significance of 0.5 using SPSS 22.0 software.

RESULTS:

The mean inter implant distance between the Group I and Group II showed that there was only marginal difference (P value ≤ 0.05) with positional accuracy in both Group I and Group II thus concluding that there was no comparable difference between Group I and Group II.

CONCLUSION:

Results showed BD Impress can be used as splinting material in multiple implant prosthesis, as both pattern resin and BD Impress exhibited similar positional accuracy in impression.

Key Words: Accuracy, BD Impress, open tray impression copings, pattern resin, polyvinylsiloxane, splinting material

Original title

Comparative evaluation of tear strength and compressive resistance of three commercially available bite registration materials: An in vitro study

**Dr.Mugilan Ramachandran, Dr.Varsha Murthy, Dr.Lakshmi Devi M,
Dr.Balaji Jayachandran, Dr.Sadish, Dr.Devameena**

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**Dr.Mugilan Ramachandran, Dr.Varsha Murthy, Dr.Lakshmi Devi M,
Dr.Balaji Jayachandran, Dr.Sadish, Dr.Devameena**

BACKGROUND:

An interocclusal record is a precise recording of a maxillomandibular position. Accurate mounting can lead to restorations that require minimal occlusal modifications intraorally, thus reducing the chairside time. The impression materials are altered by the addition of plasticizers and catalysts in order to transform them into interocclusal recording medium.

AIM:

To evaluate the tear strength and compressive resistance of three commercially available bite registration materials.

MATERIALS AND METHODS:

The present study was conducted to evaluate the tear strength and compressive resistance of three bite registration materials namely Polyether, Bis-acrylate and Thermoplastic resin. A total of 48 samples, including 16 samples for each bite registration material, were prepared. 8 samples were used in each of the three subgroups of samples for evaluation. The obtained data was subjected to statistical analysis using SPSS 22.0 software. The One way ANOVA test was used to compare study parameters among the groups. Tukey's post-hoc test was used for multiple comparison between the groups.

RESULTS:

Statistically, Bis-acrylates and Thermoplastic groups have similar tear strength but have better tear strength than the Polyether group. Bis-acrylates and Polyether Groups had similar compressive resistance but had better compressive resistance than the Thermoplastic Group.

CONCLUSION:

Thermoplastic resin was examined to have the highest tear strength followed by Bis-acrylate and Polyether. Polyether was found to have the highest compressive resistance followed by Bis-acrylate and Thermoplastic resin. Bis-acrylate showed median values for tear strength and compressive resistance. Therefore choice of interocclusal registration material can be decided by the clinician based on case specificity and considering the advantages and drawbacks of each material.

KEYWORDS:

Polyether Bite Registration material, Bis-acrylate Bite Registration material, Thermoplastic resin, BD Impress, tear strength and compressive resistance

Original title

COMPARATIVE STUDY BETWEEN SERRATIOPEPTIDASE AND FLAVONOIDS IN COMBINATION WITH DICLOFENAC ON POST-OPERATIVE COMPLICATIONS OF IMPACTED THIRD MOLAR SURGERY. DOUBLE BLINDED CLINICAL TRIAL

Dr. Nitin Babu, Dr. Yuvaraj Vaithilingam, Dr. Suresh Kumar Ganesan, Dr. Kavitha Arumugam, Dr. Vineeth Kumar Veeramani, Dr. Keerthana Rao

BACKGROUND:

Impacted third molar removal often leads to pain, swelling, and trismus due to tissue injury. These symptoms are typically managed with corticosteroids and NSAIDs like diclofenac, but these treatments carry risks, such as delayed healing. Alternative options, including serratiopeptidase and flavonoids combined with proteolytic enzymes, have shown promise in reducing inflammation and aiding recovery. This study aims to assess the combined effects of flavonoids and serratiopeptidase with diclofenac in managing postoperative symptoms after third molar extraction.

INTRODUCTION:

Postoperative pain and inflammation following mandibular third molar surgery are common concerns. This study aimed to compare the effectiveness of flavonoids and serratiopeptidase, when combined with diclofenac, in managing postoperative pain, swelling, and trismus.

Methods: Ninety-two participants undergoing mandibular third molar surgery were randomly assigned to receive either flavonoids or serratiopeptidase, both in combination with diclofenac. Pain, swelling, and trismus were assessed at various intervals postoperatively.

RESULTS:

Both treatment groups demonstrated effective pain management, with no statistically significant difference observed in pain scores between flavonoids and serratiopeptidase groups. However, flavonoids showed superior control over swelling compared to serratiopeptidase. There were no significant differences in trismus between the two groups.

CONCLUSION:

Flavonoids and serratiopeptidase, when combined with diclofenac, are effective in managing postoperative pain following mandibular third molar surgery. Flavonoids exhibit better control over swelling, suggesting their potential as a complementary therapy in postoperative care. Further studies with larger sample sizes are warranted to validate these findings.

KEYWORDS:

Flavonoids, Serratiopeptidase, Diclofenac, Mandibular Third Molar Surgery, Proteolytic enzymes.

Original title

TO COMPARE THE EFFICACY OF FLUPIRTINE MALEATE AND IBUPROFEN IN REDUCING POST OPERATIVE COMPLICATIONS RELATED TO THIRD MOLAR SURGERY-A DOUBLE BLINDED RANDOMIZED CONTROLLED TRIAL.

Aswini Parameswaran , Yuvaraj vaithilingam , Suresh Kumar Ganesan , Vineeth Kumar Veeramani , Kavitha Arumugam, Keerthana Rao

BACKGROUND: The surgical removal of impacted mandibular third molar under local anesthesia carried out in routine dental practice. Third molar surgery requires reflection of extensive mucoperiosteal flap and bone guttering which leads to severe post operative pain, swelling and trismus. It is at most important to manage post operative complications of third molar surgery. Flupirtine maleate displays properties that are different to common analgesics. they represent separate class of analgesics which are selective neuronal potassium channel opener. No published clinical study has compared the efficacy of Flupirtine Maleate and ibuprofen in reducing post operative complication of third molar surgery.

AIM: To compare the efficacy of Flupirtine Maleate and Ibuprofen in reducing post operative complications in patients undergoing surgical removal of Impacted Mandibular third molar.

OBJECTIVE: To compare efficacy of the two drugs, Flupirtine Maleate and ibuprofen in reducing post operative pain, swelling and trismus after surgical removal of mandibular third molar.

MATERIALS AND METHADODOLOGY: A total of 96 patients were randomly divided into two groups irrespective of age and sex. Each group consisting of 48 patients. The Study populations were randomly allocated to control (Group - A) and test group (Group -B), using computer generated random numbers thus allocating each patient sequentially to one of the groups. ASA I and II patients in the age group of 18 years and above with either gender. Impacted mandibular third molars of all the patients were surgically removed under local anaesthesia by the same surgeon. Group I was treated with IBUPROFEN 400MG TDS and Group II was treated with Flupirtine maleate 100 mg TDS .Patient were assessed swelling ,mouth opening and pain on 1st ,3rd,5th,7th and 12th post operative days.

RESULT: The Data entry was done in Microsoft excel sheet and was transferred to SPSS software. The data were distributed normally. There is no significance difference between in controlling post operative pain and swelling. Flupirtine maleate-controlled trismus better than ibuprofen in 1st,3rd and 12th postoperative days. There was no statistical difference between in trismus control on 7th post operative day.

CONCLUSION: The current study examined the therapeutic effectiveness of Flupirtine Maleate on post operative pain, swelling and trismus following surgical extraction of mandibular third molars. In postoperative phase, there was no significant difference between Flupirtine Maleate and Ibuprofen in reducing pain and swelling. Trismus was controlled better in patients treated with Flupirtine Maleate.

KEY WORDS: Third Molar Surgery ,Flupertine Maleate ,Ibuprofen ,Post operative complication.

Original title**COMPARATIVE EVALUATION OF CORONALLY ADVANCED FLAP WITH AND WITHOUT CHORIONIC MEMBRANE IN THE TREATMENT OF ISOLATED GINGIVAL RECESSION- A RANDOMIZED CONTROLLED TRIAL**

Dr.Geddam Navya, Dr.Senthilnathan.S, Dr.Thirumalai.S, Dr.Gayathri.H, Dr.Ahila.E, Dr.Sanghamitra.J

BACKGROUND:

Gingival recession is the "apical migration of the gingival margin below the cemento–enamel junction (CEJ). It is a multifactorial disease commonly caused by the accumulation of plaque biofilm resulting in inflammatory periodontal diseases and due to trauma caused by faulty and aggressive tooth brushing. Root coverage procedures have gained much popularity in recent years due to increasing aesthetic demands of patients. Coronally advanced flap (CAF) is a predictable technique for treating gingival recession. A current method in dentistry is the use of human chorionic membrane, a placental derivative, having biologic properties that helps in healing and regeneration.

AIM:

The aim of this study was to compare and evaluate the efficacy of Chorionic Membrane in Coronally Advanced Flap for treatment of Isolated Gingival Recession Patients.

MATERIALS AND METHODS:

This study is a single blinded randomized controlled trial. The total of 22 localized chronic periodontitis patients who are systemically healthy were enrolled in the study. The sites were randomly allocated into two groups: Group I – Coronally Advanced Flap alone, Group II – Coronally Advanced Flap with Chorionic Membrane. The clinical parameters recorded were clinical attachment level (CAL), probing depth (PD), recession height (REC-HT), recession width (REC-WD), width of keratinized gingiva (WKG) and gingival tissue thickness (GTH).

RESULTS:

The mean inter implant distance between the Group I and Group II showed that there was only marginal difference (P value ≤ 0.05) with positional accuracy in both Group I and Group II thus concluding that there was no comparable difference between Group I and Group II.

CONCLUSION:

Based on the above results we concluded that coronally advanced flap with chorionic membrane provided better results when compared with coronally advanced flap alone in Millers class-I and class-II gingival recession patients.

KEY WORDS : Coronally advanced flap, human chorionic membrane, isolated gingival recession, root coverage

Original title

COMPARATIVE EVALUATION OF STICKY BONE WITH ALLOPLASTIC BONE GRAFT IN THE TREATMENT OF INTRABONY DEFECTS- A RANDOMISED CONTROLLED TRIAL

Dr. Pooja Velraj, Dr. Senthilnathan Sivaramalingam, Dr. Gayathri Haritheertham, Dr. Thirumalai Sankaralingam, Dr. Hema Pannerselvam, Dr. Gowtham Krishna

BACKGROUND: Periodontitis is characterized by the presence of gingival inflammation, periodontal pocket formation, loss of connective tissue attachment and alveolar bone around the affected tooth. The ultimate goal of periodontal therapy is to regenerate the lost periodontal tissues caused by periodontitis. Different modalities have been employed in the treatment and regeneration of periodontal defects which include the use of bone grafts, PRF and other growth factors. Platelet concentrates (PC) are frequently used for surgical procedures in many medical fields, and the objective of these technologies is to extract (through centrifugation) all the elements from a blood sample that could be useful to improve healing and promote tissue regeneration. Platelet Rich Fibrin, a second generation platelet concentrate has shown successful regeneration of bony defects compared to other platelet concentrates. Injectable PRF (i-PRF) is a platelet concentrate in the liquid form which is being autogenous, decreases the chances of adverse reaction to the implanted materials, especially immune mediated ones as with other type of grafts, which qualify it as a viable option in bone regeneration. Additionally, it has been reported that i-PRF has greater antimicrobial activity against several periodontal pathogens. When implanted along with a bone graft, i-PRF increases the incorporation of the graft and the signaling local molecules which results in regeneration.

AIM AND OBJECTIVES: To compare and evaluate the efficacy of sticky bone with alloplastic bone graft in the treatment of intrabony defects by determining bone regeneration as evident by the increase in alveolar bone volume and height, reduction in probing pocket depth and increase in clinical attachment level.

MATERIALS AND METHODS: Fifteen subjects (Bilaterally comparable sites, n=30) with intrabony defects were randomized to test group (Sticky bone) and control group (alloplastic bone graft). Bone regeneration is determined by assessing the bone volume by measuring bone height, width and defect angle using CBCT and clinical parameters like probing pocket depth (PPD), clinical attachment level (CAL) were recorded. Open flap debridement is done in all subjects. i-PRF plus bone graft (sticky bone) is placed in test site and alloplastic bone graft alone is placed in control site. Clinical parameters were recorded at baseline, three and six months, while bone volume was assessed from CBCT at baseline and 6 months.

RESULTS:

At the baseline, there was no statistically significant difference between the tested parameters. After 6 months, the clinical parameters- PPD, CAL as well as radiographic parameters- Alveolar Bone Height (ABH), Bone Defect Angle (BDA) showed a significant increase in both the groups ($p < 0.05$) while Interdental Bone Width (IBW) remained constant before and after treatment. However, intergroup comparison showed no statistical significant difference. Conclusion:

The combination of i-PRF + alloplastic bone graft (Sticky bone) has shown significant results after 6 months, comparable to alloplastic bone graft alone in terms of periodontal regeneration. Hence, it can be used in the treatment of intrabony defects.

KEYWORDS: Injectable- Platelet Rich Fibrin, Alloplastic bone graft, Intrabony defects, Bone regeneration, 3D CBCT, Randomised Controlled Trial

Original title

COMPARATIVE EVALUATION OF STICKY BONE WITH ALLOPLASTIC BONE GRAFT IN THE TREATMENT OF INTRABONY DEFECTS- A RANDOMISED CONTROLLED TRIAL

Dr. Pooja Velraj, Dr. Senthilnathan Sivaramalingam, Dr. Gayathri Haritheertham, Dr. Thirumalai Sankaralingam, Dr. Hema Pannerselvam, Dr. Gowtham Krishna

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KEYWORDS: Injectable- Platelet Rich Fibrin, Alloplastic bone graft, Intrabony defects, Bone regeneration, 3D CBCT, Randomised Controlled Trial

Original title

A QUALITATIVE STUDY TO EXPLORE THE CHALLENGES FACED BY THE MOTHERS OF CHILDREN WITH CEREBRAL PALSY IN A SELECTED SPECIAL SCHOOL AT PUDUCHERRY

Ms.Soumya.R, Prof. Dr. Malliga.M, Department of Child Health Nursing,

BACKGROUND:

Caring for a child with cerebral palsy (CP) is demanding and requires effort, dedication, time and resources. Mothers' caring for children with CP faces various situations that may have an adverse effect on their social well-being. Demanding caring responsibilities may also lead to "an imbalance in their daily activities when compared to mothers with healthy children". This imbalance is likely to result in physical and emotional distress, subsequently affecting their social functioning. A qualitative study was undertaken to explore the challenges faced by the mothers of children with cerebral palsy in a selected special school at Puducherry.

Materials and Methods:

A qualitative approach using phenomenological design was utilized in this study. A total of 10 mothers of children with cerebral palsy were selected by using maximum variation sampling technique at a selected special school of Puducherry. In-depth interview process was utilized for data collection through open ended questionnaires. Interviews were audio-recorded and verbatim were transcribed. Colaizzi's phenomenological analysis method was chosen to interpret the phenomenon under this study.

Results:

The phenomenological data analysis process transformed the set of 10 mothers of children with cerebral palsy transcripts into significant meaning statements and thematic clusters. Eight themes and 23 sub-themes were identified on the mothers of children with cerebral palsy such as general difficulty which included difficulty in raising the child and discomfort in public places with the child and the mothers had overcome the challenges through seeking help from others, avoiding to go out and preparing the child's need, the second theme was physical health which included improper personal hygiene and hospitalization during illness and the mothers had overcome the challenges through educating about hygiene to child and managing with medicine, the third theme was psychological health which included difficulty in managing positive and negative emotions and the mothers had overcome the challenges through spending more time with child and accepting the situation, the fourth theme was dietary pattern which included difficulty in feeding the child and the mothers had overcome the challenges through preferring easily chewing foods and scheduling food time, the fifth theme was elimination pattern which included unable to communicate the elimination needs and the mothers had overcome the challenges through rewards and punishments, the sixth theme was spiritual pattern which included losing faith in God and the mothers had overcome the challenges through lots of prayers, the seventh theme was family support which included financial burden and the mothers had overcome the challenges through discussing problem with others and the eighth theme was future goals which included inability to perform basic needs and the mothers had overcome the challenges through performing daily activities were followed by the mothers of children with cerebral palsy.

Conclusion:

The findings of the present study revealed that the mothers of children with cerebral palsy faced many challenges and had overcome them. The most prevalent challenges faced by the mothers of children with cerebral palsy were difficulty in raising the child and discomfort in public places with the child. Majority of the mothers used to overcome their challenges by accepting and adapting to the situation and seeking help from others. These findings also indicate the important role for the child health nurse to motivate the mothers by creating awareness through provision of information booklet regarding cerebral palsy children and ways to overcome the challenges.

Keywords: Challenges, cerebral palsy, information booklet

Original title

TITLE "A QUALITATIVE STUDY WAS UNDERTAKEN TO EXPLORE THE SELF CARE COPING STRATEGIES AMONG PATIENTS UNDERGOING HEMODIALYSIS AT SVMCH&RC, PUDUCHERRY."

Ms. Sindhuja. J, Prof. Dr.R. Rajeswari, Department of Medical Surgical Nursing.

BACKGROUND: Patients may experience a wide variety of symptoms in hemodialysis process. These include fatigue, drowsiness, decrease in urination or inability to urinate, dry skin, itchy skin, headache, weight loss, nausea, bone pain, skin and nail changes and easy bruising, poor sleep, and shortness of breath etc. The chronicity of these illnesses, with their associated hospitalization, treatment costs, and profound impact on familial and social dynamics, demands adaptive responses from those who grapple with them. These adaptive actions, often referred to as self care coping strategies

MATERIALS AND METHODS: A qualitative approach using phenomenological design was utilized in this study. A total of 10 patients with ESRD undergoing hemodialysis were selected by using convenience sampling technique at SVMCH&RC, Puducherry. In- depth interview process was utilized for data collection through unstructured questionnaires. Interviews were audio-recorded and verbatim were transcribed. Colaizzi's phenomenological analysis method was chosen to interpret the phenomenon under this study.

RESULTS: The phenomenological data analysis process transformed the set of 10 hemodialysis patients transcripts into significant meaning statements and thematic clusters. Six themes and 20 sub-themes were identified on the patients undergoing hemodialysis such as physical health which included reduced functional abilities and increased tiredness and the patients had overcome the problems through selfcare coping strategies such as seeking help from others, avoiding to go out and bed rest for comfort, the second theme was psychological health which included mood instability and the patients had overcome the problems through spending more time family members and uses some distraction techniques, the third theme was social health which included social functioning and the patients had overcome the problems through seeking support, the fourth theme was spiritual pattern which included spiritual disconnection and patients had overcome these problems through prayer and meditation, the fifth theme was self esteem pattern which included feelings of worthlessness and impact of physical appearance and the patients had overcome the problems through focusing on abilities, the sixth theme was support group which included emotional and physical strain on loved ones, financial burden, need for comprehensive support and the patients had overcome the problems through open communication and joining support groups.

CONCLUSION: the findings of the present study revealed that the patients undergoing hemodialysis faced many problems to cope up with them. The most prevalent problems faced by the patients undergoing hemodialysis were increased fatigue which reduces their functional ability also mood instability and need for comprehensive support. Majority of the patients used to overcome their problems by using self care strategies such as bed rest to avoiding go for out also spending leisure time with their family members and seeking help from others. These findings also indicate the important role for the staff nurse to motivate the patients by creating awareness through provision of information booklet regarding self care coping strategies of patients undergoing hemodialysis.

KEY WORDS: Self care coping strategies, hemodialysis, information booklet.

Original title

A QUALITATIVE STUDY WAS UNDERTAKEN TO EXPLORE THE SELFCARE COPING STRATEGIES AMONG PATIENTS UNDERGOING HEMODIALYSIS AT SVMCH&RC, PUDUCHERRY

Ms. Sindhuja. J, Prof. Dr.R. Rajeswari, Department of Medical Surgical Nursing

BACKGROUND:

Postoperative pulmonary complications are broadly defined as conditions affecting the respiratory track that can adversely influence clinical course of the patient after surgery. Risk reduction strategies, performing short duration and/or minimally invasive surgery and use of anesthetic technique of combined regional with general anesthesia.

MATERIALS AND METHODS:

The purpose of the study was to assess the effectiveness of I COUGH protocol on reduction of postoperative pulmonary complications among patients undergoing surgeries with general anesthesia at SVMCH&RC, Puducherry. An extensive review of literature was done to understand the in-depth of the study and for identifying the appropriate tool. A quantitative approach with quasi experimental pretest and posttest design was adopted for the study. Pilot study was conducted for a week to assess the feasibility of the study. A total of 4 samples were selected by using Non-probability purposive sampling technique. The tool reliability was obtain by using interrater method. The 'r' value was 0.9 which indicated high reliability of the tool. The main study was conducted at SVMCH&RC, Puducherry among patients undergoing surgeries with general anesthesia, 20 subjects in study group and 20 subjects in control group. Pretest with the demographic variables, clinical variables and modified ARISCAT scale was used to collect the data. The I COUGH Protocol was given for 30 minutes each day to reduce the postoperative pulmonary complications among patient undergoing surgery with general anesthesia. Posttest was done to the group on the 7th day with the same scale. The collected data were analyzed based on the above mentioned objectives using descriptive and inferential statistics. The statistical analysis showed that there was reduction in postoperative pulmonary complications in posttest.

RESULT:

In frequency and percentage distribution of demographic variables among study group of patients undergoing surgery with general anesthesia., 8(40%) were belongs to the age group between 40 - 49 years, 14(70%) were male, 17(85%) samples were Hindus, 11(55%) had secondary education, 15(75%) were married, 15(75%) were under private employment. Regarding family income 12(60%) were earning between Rs.25,001 - 35,000 per month, 14(70%) received information through public health workers, 8(40%) samples had the habit of alcoholism and 11(55%) were agriculture workers. In control group, 9(45%) were belongs to the age group between 40 - 49 years, 14(70%) were male, 18(90%) samples were Hindus, 8(40%) had secondary education, 17(85%) were married, 13(65%) were under private employment. Regarding family income 13(65%) were earning between Rs.25,001 - 35,000 per month, 15(75%) received information through public health workers, 10(50%) samples had the habit of alcoholism and 8(40%) were agriculture workers.

In frequency and percentage distribution of clinical variables among study group of patients undergoing surgery with general anesthesia, all 20(100%) were in the post operative day 1-5, 10(50%) had underwent upper abdominal surgical incision, 9(45%) were done surgery for less than 2 hours, 16(80%) were done no emergency procedure, 15(75%) samples had no previous surgical history, 13(65%) sample had experienced disturbed sleep duration and 12(60%) had BMI between the range of 18.5 - 24.9. In control group, all 20(100%) were in the post operative day 1-5, 8(40%) had underwent upper abdominal surgical incision, 8(40%) were done surgery for less than 2 hours, 17(75%) were done no emergency procedure, 14(70%) samples had no previous surgical history, 11(55%) sample had experienced disturbed sleep duration and 13(65%) had BMI between the range of 18.5 - 24.9.

In this study result indicates that the, frequency and percentage distribution of pretest level of pulmonary complications of patients undergoing surgery with general anesthesia in the study and control group. In the study group, the pretest level of pulmonary complications 13(65%) had moderate risk, and 7(35%) had high risk and in the posttest 14(70%) had low risk and 6(30%) had moderate risk. Similarly, in the control group, the pretest level 11(55%) had moderate risk and 9(45%) had low and high risk and in the posttest level 13(65%) had moderate risk and 5(25%) had high risk and 2(10%) had low risk.

In present study, the results indicates that in the pretest the calculated student independent "t" test value of $t=0.8509$ was not statistically significant at $p<0.05$ level. This clearly infers that there was no significant difference in the level of pulmonary complications among the patients undergoing surgery with general anesthesia between the study and control groups. In the post test the calculated student independent "t" test value of $t=4.575$ was statistically significant at $p<0.05$ level. This clearly infers that there was significant difference in the level of pulmonary complications among the patients undergoing surgery between the groups in which the patients in the study group experience more reduction in the level of post operative pulmonary complications than the patients in the control group who had undergone normal hospital routines. Hence the Hypothesis H1 was accepted.

In present study, the result shows that the demographic variables, age and educational status ($\chi^2=15.932$, $P=0.014$), ($\chi^2=7.78$, $P=0.021$) respectively has shown statistically significant association with pretest level of post operative pulmonary complications among patients undergoing surgery with general anesthesia in the study and control group at $p<0.05$ level. The other demographic variable has shown statistically not significant association with pretest level of post operative pulmonary complications among patients undergoing surgery with general anesthesia in the study and control group. Hence, Hypotheses H2 was accepted.

In this study, the pretest level of post operative pulmonary complications among patients undergoing surgery with their selected clinical variables. It was observed that the clinical variables did not show statistically significant association with pretest level of post operative pulmonary complications among patients undergoing surgery at $p<0.05$ level.

CONCLUSION

The result of this study concluded that I COUGH protocol helps in reduction of post operative pulmonary complications among patients undergoing surgeries with general anesthesia.

KEYWORDS

Postoperative pulmonary complications, I COUGH Protocol, Surgery patients, general anesthesia.

Original title

TITLE "A QUALITATIVE STUDY WAS UNDERTAKEN TO EXPLORE THE SELF CARE COPING STRATEGIES AMONG PATIENTS UNDERGOING HEMODIALYSIS AT SVMCH&RC, PUDUCHERRY."

Ms. Sindhuja. J, Prof. Dr. R. Rajeswari, Department of Medical Surgical Nursing

BACKGROUND:

Patients may experience a wide variety of symptoms in hemodialysis process. These include fatigue, drowsiness, decrease in urination or inability to urinate, dry skin, itchy skin, headache, weight loss, nausea, bone pain, skin and nail changes and easy bruising, poor sleep, and shortness of breath etc. The chronicity of these illnesses, with their associated hospitalization, treatment costs, and profound impact on familial and social dynamics, demands adaptive responses from those who grapple with them. These adaptive actions, often referred to as self care coping strategies

MATERIALS AND METHODS:

A qualitative approach using phenomenological design was utilized in this study. A total of 10 patients with ESRD undergoing hemodialysis were selected by using convenience sampling technique at SVM-CH&RC, Puducherry. In- depth interview process was utilized for data collection through unstructured questionnaires. Interviews were audio-recorded and verbatim were transcribed. Colaizzi's phenomenological analysis method was chosen to interpret the phenomenon under this study.

RESULTS:

The phenomenological data analysis process transformed the set of 10 hemodialysis patients transcripts into significant meaning statements and thematic clusters. Six themes and 20 sub-themes were identified on the patients undergoing hemodialysis such as physical health which included reduced functional abilities and increased tiredness and the patients had overcome the problems through selfcare coping strategies such as seeking help from others, avoiding to go out and bed rest for comfort, the second theme was psychological health which included mood instability and the patients had overcome the problems through spending more time family members and uses some distraction techniques, the third theme was social health which included social functioning and the patients had overcome the problems through seeking support, the fourth theme was spiritual pattern which included spiritual disconnection and patients had overcome these problems through prayer and meditation, the fifth theme was self esteem pattern which included feelings of worthlessness and impact of physical appearance and the patients had overcome the problems through focusing on abilities, the sixth theme was support group which included emotional and physical strain on loved ones, financial burden, need for comprehensive support and the patients had overcome the problems through open communication and joining support groups.

CONCLUSION:

The findings of the present study revealed that the patients undergoing hemodialysis faced many problems to cope up with them. The most prevalent problems faced by the patients undergoing hemodialysis were increased fatigue which reduces their functional ability also mood instability and need for comprehensive support. Majority of the patients used to overcome their problems by using selfcare strategies such as bed rest to avoiding go for out also spending leisure time with their family members and seeking help from others. These findings also indicate the important role for the staff nurse to motivate the patients by creating awareness through provision of information booklet regarding self care coping strategies of patients undergoing hemodialysis.

KEY WORDS:

Self care coping strategies, hemodialysis, information booklet.

Original title

"EFFECTIVENESS OF NURSING CARE BUNDLE ON PHYSIOLOGICAL PARAMETERS AMONG COVID-19 AFFECTED DIABETIC PATIENTS AT SELECTED VILLAGES, PUDUCHERRY"

Ms. Angadi Ramya Teja Sri, Prof. Dr. Rajeswari. R Department of Medical Surgical Nursing.

BACKGROUND:

COVID-19 presents a dual challenge for diabetic patients, especially in India, which has a large diabetic population exceeding 77 million. The burden of the disease continues to rise, with COVID-19-related complications leading to severe health issues and even death. Diabetic individuals infected with SARS-CoV-2 experience higher hospitalization rates, severe pneumonia, and higher mortality compared to non-diabetic individuals. The relationship between COVID-19 and diabetes is complex and bidirectional. Diabetes is a major risk factor for severe COVID-19, with factors such as hyperglycemia, obesity, and other co-morbidities contributing to this risk. The study aims to explore the impact of a nursing care bundle on improving physiological parameters (blood glucose, heart rate, and respiratory rate) in diabetic patients affected by COVID-19.

MATERIALS AND METHODS:

This quantitative research study utilized a Quasi-experimental Non-Randomized Pre-test and Post-test Control Group Design. The study was conducted among COVID-19 affected diabetic patients from selected villages in Puducherry. The sample consisted of 60 diabetic patients, 30 in the study group (receiving nursing care bundle) and 30 in the control group (receiving routine care). Data were collected using a structured questionnaire and pre-existing clinical records. Physiological parameters (blood glucose, heart rate, and respiratory rate) were measured at pre-test and post-test intervals. The statistical analysis was performed using descriptive statistics and inferential statistics (paired 't'-test) to assess the effectiveness of the nursing care bundle.

RESULTS:

In this study the result indicated that, in study group the pretest level 23(76.7%) had Severe, 6(20%) had Moderate and 1(3.3%) had Normal level of blood glucose. Regarding to heart rate 17(56.7%) had Severe, 10(33.3%) had Moderate and 3(10%) had Normal level of heart rate. In respiratory rate 17(56.7%) had Severe and 13(43.3%) had Moderate level of respiratory rate. In posttest, 24(80%) had Moderate, 4(13.3%) had severe and 2(6.7%) had Normal level of blood glucose.

Regarding to heart rate 1(3.3%) had severe, 14(46.7%) had Moderate and 15(50%) had Normal level of heart rate. In respiratory rate 19(63.3%) had Moderate, 10(33.4%) had normal and 1(3.3%) had severe level of respiratory rate. Similarly, In the control group the pretest level 20(66.7%) had Severe, 8(26.7%) had Moderate and 2(6.6%) had Normal level of blood glucose.

Regarding to heart rate 5(53.3%) had Severe, 12(40%) had Moderate and 2(6.7%) had Normal level of heart rate. In respiratory rate 20(66.7%) had Severe, 8(26.7%) had Moderate and 2(6.6%) had Normal level of respiratory rate. In the posttest 21(70%) had Severe, 5(16.7%) had Moderate and 4(13.3%) had Normal level of blood glucose.

Regarding to Heart rate 13(43.3%) had Severe and Moderate and 4(13.3%) had Normal level of heart rate. Regarding to Respiratory rate 18(60%) had Severe, 10(33.4%) had Moderate and 2(6.6%) had Normal level of Respiratory rate. In comparison within the study and control group, among study group the mean and standard deviation of effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose] among COVID-19 affected Diabetic patients in the pretest was $127.87+10.04$ and in the post- test was $116.6+8.66$.

The calculated 't' value was 10.63, the mean and standard deviation of effectiveness of selected Nursing care bundle on physiological parameter [Heart rate] among COVID-19 affected Diabetic patients in the pretest was $109.60+9.43$ and in the post- test was $97.53+8.75$. The calculated 't' value was 13.53. Similarly, regarding the mean and standard deviation of Effectiveness of selected Nursing care bundle on physiological parameter [Respiratory rate] among COVID-19 affected Diabetic patients in the pretest was $21.13+2.08$ and in the posttest was $17.80+2.48$. The calculated 't' value was 12.04, proved statistically high significant difference of Effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose, Heart rate and Respiratory rate].

Similarly, In the control group the mean and standard deviation of effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose] among COVID19 affected Diabetic patients in the pretest was $126.07+13.3$ and in the post- test was $128.23+17.116$. The calculated 't' value was 1.53, the mean and standard deviation of effectiveness of selected Nursing care bundle on physiological parameter [Heart rate] among COVID-19 affected Diabetic patients in the pretest was $109.60+9.209$ and in the post-test was $108.20+9.48$. The calculated 't' value was 1.27 and the mean and standard deviation of Effectiveness of selected Nursing care bundle on physiological parameter [Respiratory rate] among COVID-19 affected Diabetic patients in the pretest was $21.07+2.55$ and in the post- test was $21.13+2.501$. The calculated 't' value was 0.19.

These results proved that no statistically non-significant difference of effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose, Heart rate and Respiratory rate]. Whereas in comparison between the study and control group, the result indicates that, In the pretest level the mean and standard deviation of the effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose] among COVID-19 affected Diabetic patients in the Study group was $127.87+10.04$ and in the control group was $126.07+13.30$.

The calculated 't' value was 0.59, the mean and standard deviation of the effectiveness of selected Nursing care bundle on physiological parameter [Heart rate] among COVID-19 affected Diabetic patients in the study group was $109.60+9.43$ and in the control group was $109.60+9.20$. The calculated 't' value was 0.0 and the mean and standard deviation of the effectiveness of selected Nursing care bundle on physiological parameter [Respiratory rate] among COVID-19 affected Diabetic patients in the study group was $21.13+2.08$ and in the control group was $21.07+2.55$.

The calculated 't' value was 0.11 showed there was no significant difference between effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose, Heart rate and Respiratory rate].

Similarly, In the posttest level the mean and standard deviation of the effectiveness of selected Nursing care bundle on physiological parameters [Blood glucose] among COVID-19 affected Diabetic patients in the Study group was 116.60 ± 8.66 and in the control group was 128.23 ± 17.11 . The calculated 't' value was 3.32, the mean and standard deviation of the effectiveness of selected Nursing care bundle on physiological parameter [Heart rate] among COVID-19 affected Diabetic patients of the Study group was 97.53 ± 8.75 and in the control group was 108.20 ± 9.48 . The calculated 't' value was 4.52 and the mean and standard deviation of the effectiveness of selected Nursing care bundle on physiological parameter [Respiratory rate] among COVID-19 affected Diabetic patients in the Study group was 17.80 ± 2.48 and in the control group was 21.13 ± 2.50 .

The calculated 't' value was 5.18 shows statistically significant difference between effectiveness of selected Nursing care bundle on physiological parameter [Blood glucose, Heart rate and Respiratory rate]. Hence the hypothesis H1 was accepted. In this study, there was no significant association between the pretest level of physiological parameters [Blood glucose, Heart rate and Respiratory rate] and the demographic variables in the study and control group. Hence the Hypothesis H2 was rejected. In this study, there was a significant association between the pretest level of physiological parameter Blood glucose and the clinical variables namely the Duration of Diabetes mellitus in the study and control group. Hence the Hypothesis H3 was accepted in relation to the physiological parameter [Blood glucose]. There was no significant association between the pretest level of physiological parameters Heart rate, Respiratory rate and the clinical variables in the study and control group. Hence the Hypothesis H3 was rejected in relation to physiological parameters Heart rate and Respiratory rate.

Conclusion:

The study concluded that the nursing care bundle was effective in improving physiological parameters, specifically blood glucose levels, heart rate, and respiratory rate, among COVID-19 affected diabetic patients in the study group. There was no significant change in the control group. The study also found a significant association between blood glucose levels and the duration of diabetes, but no association with demographic factors.

Keywords:

Nursing care bundle, Effectiveness, Physiological parameters, COVID-19, Diabetic patients.

Original title

"EFFECTIVENESS OF MOULAGES AIDED TEACHING ON KNOWLEDGE REGARDING BURNS AMONG NURSING STUDENTS AT SELECTED COLLEGES, PUDUCHERRY"

Ms.Gayathiri, Prof. Dr. Rajeswari.R, Department of Medical Surgical Nursing

BACKGROUND:

Moulage, in its traditional form, is the art of replicating illnesses and wounds through casting wax moulds. The origins can be traced back to Ancient Egypt and the forbidden practices of 17th century Europe. Moulage spread throughout Europe as a teaching tool, particularly in dermatology and venereal disease recognition. It has evolved into a method used in simulation to visually and tactically engage students in patient history and physical examination. Moulage is integral in creating realism in simulations, contributing to the authenticity of training. By helping students engage emotionally and believably, it enhances learning in nursing education, particularly for topics such as burns and other traumatic injuries.

OBJECTIVES:

- 1.To assess the pretest and posttest knowledge regarding burns among nursing students in both the study and control groups.
- 2.To evaluate the effectiveness of the moulages aided teaching program on knowledge regarding burns among nursing students in the study group.
- 3.To associate the pretest level of knowledge regarding burns among nursing students with selected demographic variables in both the study and control groups.

Materials and Methods:

A quantitative research approach was used, employing a True Experimental Pre-test and Post-test Design. The study selected 100 nursing students using a simple random sampling technique with computer-generated random numbers. The participants were divided into two groups: 50 in the study group and 50 in the control group.

- Pretest: Administered using a structured knowledge questionnaire.
- Intervention: The study group received moulages aided teaching, while the control group received routine teaching about burns.
- Posttest I: Conducted immediately after the intervention.
- Posttest II: Conducted 7 days after the intervention.

The data collected was analyzed using descriptive and inferential statistics.

RESULTS:

In study group, for pretest, 36(72%) had inadequate knowledge, 14(28%) had moderately adequate knowledge. Where as in posttest- I and II 50(100%) had adequate knowledge. Among the control group in pretest, 33(66%) had Inadequate knowledge, 17(34%) had Moderately adequate knowledge. where as in posttest-I, 6(12%) had Inadequate knowledge, 34(68%) had Moderately adequate knowledge, 10(20%) had Adequate knowledge. In Posttest-II for the control group, 15(30%) had Inadequate knowledge, 30(60%) had moderately adequate knowledge, 5(10%) had Adequate knowledge.

CONCLUSION:

The study concluded that moulages aided teaching was significantly more effective in enhancing the knowledge of nursing students regarding burns compared to routine teaching methods.

KEYWORDS:

Moulages Aided Teaching, Knowledge, Burns, Nursing Students.

Original title

EFFECTIVENESS OF BEAST (BREATHING EXERCISE AND ABDOMINAL STRENGTH TRAINING) ON PAIN AND ACTIVITIES OF DAILY LIVING AMONG POST CAESAREAN SECTION MOTHERS AT SELECTED HOSPITAL, PUDUCHERRY

Mrs. Kalaiarasi S, Mrs. Amudha G, Department of Obstetrics and Gynaecological Nursing,

BACKGROUND:

The term "Caesarean" is often linked to ancient Rome, particularly to the birth of Julius Caesar, but historical records suggest that the procedure predates this moment. It was originally performed in dire circumstances, particularly when the life of the mother or child was at risk. Today, Caesarean sections (LSCS) are common, but recovery can be challenging, with pain and impaired activities of daily living being prominent concerns. In an effort to enhance recovery, Breathing Exercise and Abdominal Strength Training (BEAST) have been explored as therapeutic interventions to alleviate pain and improve the functionality of post-caesarean section mothers.

OBJECTIVES:

1. To assess the pretest and posttest level of pain and activities of daily living among post-caesarean section mothers.
2. To evaluate the effectiveness of BEAST (Breathing Exercise and Abdominal Strength Training) on pain and activities of daily living among post-caesarean section mothers.
3. To explore the association between the pretest level of pain and activities of daily living with selected demographic variables.
4. To explore the association between the pretest level of pain and activities of daily living with selected clinical variables.

MATERIALS AND METHODS:

A Pre-Experimental Research Design (One Group Pretest – Posttest Design) was adopted for the study. The sample consisted of 40 post-caesarean section mothers selected using a non-probability convenience sampling technique from SVMCH&RC, Ariyur, Puducherry.

- Demographic and Clinical Data Collection: The demographic and clinical variables were collected.
- Instruments Used:
 - Pain Assessment: Wong Baker Faces Pain Rating Scale.
 - Activities of Daily Living: Modified Barthel Index Scoring Form.
- Intervention: BEAST was administered from the 2nd postoperative day to the 7th postoperative day.
- Posttest: Conducted on the 7th postoperative day using the same instruments.

RESULTS:

In this study the result indicates that the level of pain in the pretest was 36(90%) had Severe pain and 4(10%) had Moderate level of pain. While in the posttest, 33(82.5%) had Mild pain and 7(17.5%) had Moderate level of pain. In this study the level of activities of daily living in the pretest 36(90%) had Total dependency and 4(10%) had Severe dependency. While in the posttest 39(97.5%) had Moderate dependency and 1(2.5%) had Slight dependency.

The result of the comparison of mean and standard deviation in pretest the pain among post caesarean section mothers was 8.13 ± 0.853 and in posttest 2.95 ± 0.639 . The calculated paired $t=27.87$, which is statistically significant at $p<0.001$. About activities of daily living the mean and SD in the pretest was 18.75 ± 3.152 and in posttest was 86.13 ± 3.667 . The calculated $t=88.73$ shows statistically significant at $p<0.001$. Hence the hypothesis H1 and H2 was accepted. Regarding association between the pretest level of pain among post caesarean section mothers with the selected demographic variables had showed no statistically significant.

Hence the hypothesis H3 was rejected. Regarding association between the pretest levels of pain among post caesarean section mothers with the selected clinical variables had showed no statistically significant. Hence the hypothesis H4 was rejected. Regarding association between the pretest levels of activities of daily living among post caesarean section mothers with the selected demographic variables had showed no statistically significant. Hence the hypothesis H5 was rejected. Regarding association between the pretest level of activities of daily living among post caesarean section mothers with the selected clinical variables, gestational age at delivery had shown statistically significant at $p<0.001$. Hence the hypothesis H6 was accepted.

CONCLUSION:

The study concluded that BEAST (Breathing Exercise and Abdominal Strength Training) was highly effective in reducing pain and improving activities of daily living among post-caesarean section mothers. The significant improvements in pain levels and daily living activities support the hypothesis that BEAST is an effective intervention. Furthermore, no significant association was found between pain or activities of daily living and the demographic or clinical variables, except for gestational age at delivery.

KEYWORDS:

BEAST, Breathing Exercise, Abdominal Strength Training, Post-Caesarean Section, Pain, Activities of Daily Living, Mothers

Original title

EFFECTIVENESS OF NURSING CARE INTERVENTION PACKAGE ON REDUCTION OF LOW BACK PAIN AMONG AT SELECTED VILLAGES, PUDUCHERRY.

Ms. Kaviya. R, Dr. Prof. Chandralekha. K Department of Medical Surgical Nursing

BACKGROUND:

Low back pain is the 5th most common reason for the physician visit affect nearly 60 to 80% of the people throughout their lifetime. Low back pain can have deliberating effects on physical, psychological and social well- being, leading to a reduced quality of life and functional impairment.

MATERIALS AND METHODS:

The design adopted for the study was a true experimental Randomized Pre-test and Post-test with Control group design. 60 samples were selected from which 30 samples were in study group and 30 samples were in control group at SVMCH adopted villages - Ariyur, Pangur. The data collection was done with a Modified numerical pain rating scale. Study group received selected Nursing intervention package for 7 days. The post-test was conducted after 7 days of intervention for the study group and control group. The collected data were analysed based on the above-mentioned objectives using descriptive and inferential statistics.

RESULT:

In the study, the pre-test mean score of pain in the study group was 6.90 ± 1.12 and post-test mean score was 3.56 ± 0.93 . The mean difference score was 3.34. The calculated student paired 't' test value of $t=25.673$ was statistically significant at $p < 0.001$ level. This clearly shows that Nursing Care intervention package on reduction of low back pain administered to the women in the study group was found to be effective in reducing the level of pain in the post test. In this study, pre-test mean score of pain in the control group was 7.06 ± 0.73 and post-test mean score was 6.93 ± 0.86 .

The mean difference score was 0.13. The calculated student paired 't' test value of $t=1.43.9$ was not statistically significant at $p < 0.05$ level. This clearly shows that there was statistically significant difference between the pre-test and post-test level of low back pain among women in the control group who had undergone normal daily routines.

CONCLUSION:

According to the study, the study group's post-test score significantly decreased in comparison to the control group. Therefore, it can be said that the Nursing care intervention package aids in lowering women's levels of low back pain.

Keywords: Nursing care intervention package, effectiveness, low back pain, women.

Original title

"EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING MANAGEMENT OF THE POST-COVID SYNDROME AMONG RECOVERED PATIENTS AT A SELECTED HOSPITAL, PUDUCHERRY

Mr. Moganaraman. D, Dr. Prof. Chandralekha. K Department of Medical Surgical Nursing

BACKGROUND:

Post-COVID syndrome, or "long COVID," refers to a range of symptoms that persist after the acute phase of COVID-19 has resolved. Managing these symptoms effectively is crucial for the well-being of recovered patients. The study aimed to assess the effectiveness of a self-instructional module designed to improve knowledge about managing post-COVID syndrome among patients who have recovered from the illness.

MATERIALS AND METHODS:

The study employed a pre-experimental, one-group pretest-posttest research design and was conducted in a hospital setting in Puducherry, India. A sample of 60 adult patients who had recovered from COVID-19 was selected using non-probability convenience sampling. To assess participants' knowledge regarding the management of post-COVID syndrome, a structured knowledge questionnaire was used. The reliability of the tool was determined using the test-retest method, with an 'r' value of 0.7, indicating high reliability. Participants were administered a self-instructional module, and a posttest was conducted after 7 days using the same tool. Descriptive and inferential statistics, including paired 't' tests and chi-square tests, were used for data analysis to evaluate the effectiveness of the intervention.

RESULTS:

The demographic variables of the participants showed that 38.3% were above 50 years of age, 63.3% were male, and 70% had only primary school education. A majority, 68.3%, had a monthly income ranging from Rs. 15,000 to 25,000, and 63.3% lived in rural areas. Additionally, 50% of the participants consumed alcohol, and 60% were skilled workers. Regarding clinical variables, 100% of the participants had been affected by COVID-19, with 43.3% contracting the virus in 2019. Furthermore, 81.7% had received the COVID-19 vaccine. In terms of knowledge assessment, the mean pretest knowledge score was 13.50 ± 1.80 , while the posttest mean score increased to 19.58 ± 2.22 , reflecting a mean difference of 6.08. A paired 't' test value of 20.152, which was statistically significant at $p < 0.001$, indicated a substantial improvement in knowledge after the intervention. Statistical analysis also revealed significant associations between the pretest knowledge level and educational status ($p = 0.036$), as well as between comorbidity status ($p = 0.038$) and treatment for comorbid diseases ($p = 0.043$).

CONCLUSIONS:

The self-instructional module was effective in increasing the knowledge of recovered COVID-19 patients regarding the management of post-COVID syndrome. Statistically significant associations were found between the pretest knowledge level and the educational level of the participants, as well as between the presence of comorbid conditions and the treatment they received for them. The study supports the use of educational interventions, such as self-instructional modules, in enhancing post-COVID care knowledge among recovered patients.

KEYWORDS:

Self-instructional module, Level of knowledge, Management, Post-COVID syndrome, Recovered patients.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF NESTING ON SLEEP QUALITY AMONG NEWBORNS AT SELECTED VILLAGES, PUDUCHERRY

Ms. Priyanka. S, Prof. Dr. Chandraleka. E Department of Child health Nursing

BACKGROUND:

Newborn sleep quality is crucial for their growth and development. The practice of nesting, which involves creating a secure and comforting environment for newborns, has been suggested as an intervention to improve sleep quality. This study aims to assess the effectiveness of nesting on sleep quality among newborns in selected villages of Puducherry.

MATERIALS AND METHODS:

Study Design: Quasi-experimental, one-group pretest-posttest research design.

Setting: Selected villages in Puducherry, India.

Sample: 60 newborns selected using probability simple random sampling (computer-generated random numbers).

Tools: A structured demographic and sleep variables checklist was used for the pretest and posttest sleep quality assessment.

Procedure: A pretest was conducted to assess the sleep quality using the structured checklist.

Nesting intervention was provided to the newborns, and a posttest was conducted on the 7th day using the same tool.

Statistical Analysis: Descriptive and inferential statistics, including paired 't' tests, were used to analyze the data.

RESULTS:

Pretest Findings:

71.7% of newborns had an average level of sleep quality.

21.6% had a bad level of sleep quality.

6.7% had a good level of sleep quality.

The mean score of sleep quality was 12 ± 2 .

Posttest Findings:

60% of newborns had an excellent level of sleep quality.

40% had a good level of sleep quality.

The mean score of sleep quality was 20.93 ± 2.284 .

Statistical Analysis:

The mean score improvement from pretest (12 ± 2) to posttest (20.93 ± 2.284) was highly significant, with a paired 't' test value of 23.31 and $p < 0.001$.

No significant association was found between pretest sleep quality and demographic variables.

CONCLUSIONS:

The study concluded that the nesting technique was effective in significantly enhancing the sleep quality of newborns. The intervention resulted in a marked improvement in sleep quality as evidenced by the posttest results.

KEYWORDS:

Nesting, Sleep quality, Sleep pattern, Newborns, Sleep intervention.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF SELECTED NURSING INTERVENTIONS ON NOMOPHOBIA AMONG ADOLESCENTS AT SELECTED SCHOOL, PUDUCHERRY

Ms. Rubadevi, Dr. Prof. Chandraleka. E Department of Child Health Nursing

BACKGROUND:

Nomophobia (or) No Mobile Phone Phobia is used to describe a psychological condition when people have a fear of being detached from mobile phone connectivity. Various psychological factors are involved when a person overuses the mobile phone. The signs and symptoms are observed in Nomophobia cases include anxiety, respiratory alterations, trembling, perspiration, agitation, disorientation and tachycardia. Nomophobia may also lead to physical problems like pain in elbows, hands and necks due to constant use. Anxiety and stress reactions may be experienced by a normal individual in public settings where mobile phone use is restricted.

MATERIALS AND METHODS:

A quantitative research approach was adopted for this study. The research design adopted for this study was True Experimental Pretest and Posttest control group Design.

RESULTS:

The frequency and percentage distribution of demographic variables among study group majority of students 15 (42.9%) were under the age group of 15 years, 21 (60%) were male, 28 (80%) samples followed Hinduism. 10 (28.6%) were belongs to 11th standard. Regarding monthly income of family 10 (28.6%) had an income of Rs.5001 – Rs.10000 and Above Rs.15000. Type of family 25 (71.4%) belongs to nuclear family. 19 (54.3%) students were using mobile phone less than 1 hour per day. Area of living 29 (82.9%) were coming from urban area. Regarding siblings 17 (48.6%) were having 1 sibling and 18 (51.4%) adolescent's parents had primary education. Whereas in control group, 13 (37.1%) were under the age group of 14 years, 22 (62.9%) were male, 22 (62.9%) samples followed Hinduism. 9 (25.7%) were belongs to 9th, 10th, and 11th standard. Regarding monthly income family 12 (34.3%) had an income of Below Rs.5000 and Above Rs.15000. Type of family 19 (54.3%) belongs to nuclear family. 17 (48.6%) were using mobile phone less than 1 hour per day. Area of living 26 (74.3%) were coming from urban area. Regarding siblings 13 (37.1%) were having 1 sibling and 20 (57.1%) adolescent's parents had secondary education. In this study the result indicated that, in study group the pretest level 17 (48.6%) had Severe, 16 (45.7%) had Moderate and 2 (5.7%) had Mild level of Nomophobia. In posttest 23 (65.8%) had Moderate, 6 (17.1%) had Mild and Severe Nomophobia. Similarly, In the control group the pretest level 23 (65.7%) had Moderate, 11 (31.4%) had Severe and 1 (2.9%) had Mild level of Nomophobia. In posttest 23 (65.7%) had Moderate, 10 (28.6%) had Severe and 2 (5.7%) had Mild level of Nomophobia. The comparison of mean, standard deviation in pretest and posttest among study group on reducing the level of nomophobia among adolescents is (60.43+15.118 / 49.40+15.073). The calculated 't' value was 4.99 which was greater than the tabulated value at ($p < 0.005$) level. The post comparison of mean, standard deviation between the study group and control group on reducing the level of nomophobia among adolescents is (49.91+15.118 / 57.46+14.151). The calculated 't' value was 2.15, which was greater than the tabulated value at ($p < 0.005$) level. Hence the research hypotheses H1 was accepted. It was evident that the selected nursing interventions will reduce the level of nomophobia among adolescents. There is no significant association between the pretest level of nomophobia among adolescents with the selected demographic variables in the study group and control group. Hence the research hypotheses H2 was rejected.

CONCLUSION:

The present study assessed the effectiveness of an awareness programme on knowledge regarding nomophobia among adolescents. The results of the study concluded that the awareness programme was effective and the adolescent girls gained knowledge regarding nomophobia among adolescents.

KEYWORDS:

Nursing interventions, effectiveness, nomophobia, Adolescents.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF AN AWARENESS PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF POLYCYSTIC OVARIAN SYNDROME AMONG ADOLESCENT GIRLS AT A SELECTED SCHOOL, PUDUCHERRY

N. Sathyabama, Mrs. S. Kavitha, Department of Obstetrics and Gynecological Nursing.

BACKGROUND:

Polycystic ovarian syndrome (PCOS) is one of the most common endocrinopathy affecting females of reproductive age with an estimated global prevalence of 4–20%. The wide variation in prevalence rates across the world is attributed to the lack of unified diagnostic criteria among prevalence studies. Moreover, PCOS is known to be significantly associated with obesity and metabolic syndrome. A study to assess the effectiveness of an awareness programme on knowledge regarding prevention of Polycystic ovarian syndrome among adolescent girls at a selected school, Puducherry.

MATERIALS AND METHODS:

The design adopted for the study was a true experimental pretest and posttest control group design to assess the effectiveness of an awareness programme on knowledge regarding prevention of Polycystic ovarian syndrome among adolescent girls. A simple random sampling technique (computer generated sampling method) was used to select 80 adolescent girls. 40 samples were in study group and 40 samples were in control group at Government Girls higher secondary school Kathirkamam, Puducherry. Pretest was done with a structured knowledge questionnaire. Awareness programme was given to the study group. On the 7th day posttest was conducted for both study and control group with the same knowledge questionnaire. After posttest information booklet was given to both study and control group. The collected data were analysed based on the above mentioned objectives by using descriptive and inferential statistics.

RESULT :

In the pretest of the study group, 34(85%) had moderate level of knowledge, 4(10%) had inadequate level of knowledge and 2(5%) had adequate level of knowledge. Whereas in the posttest 29(72.5%) had adequate level of knowledge and 11(27.5%) had moderate level of knowledge. In the control group, the level of knowledge in the pretest was 33(82.5%) had moderate level of knowledge, 6(15%) had inadequate level of knowledge and 1(2.5%) had adequate level of knowledge. Whereas in the posttest 39(97.5%) had moderate level of knowledge and 1(2.5%) had adequate level of knowledge. The result of the comparison of posttest mean, standard deviation of knowledge score between the study group and control group among adolescent girls was $14.88 \pm 1.897 / 9.10 \pm 2.240$ the calculated 't' value was 12.44 shows statistically significant difference on the level of knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls in study and control group of posttest.

CONCLUSION:

The present study assessed the effectiveness of an awareness programme on knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls. The results of the study concluded that the awareness programme was effective and the adolescent girls gained knowledge regarding prevention of polycystic ovarian syndrome among adolescent girls.

KEY WORDS:

Awareness Programme, Polycystic ovarian syndrome, Adolescent Girls

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF VIRTUAL REALITY BASED AWARENESS EDUCATION ON LEVEL OF COPING AMONG ALCOHOL DEPENDENCE CLIENTS AT SELECTED HOSPITAL, PUDUCHERRY

Ms.Vasanthanila. M, Prof. Dr.Jayanthi.K, Department of Mental Health Nursing.

BACKGROUND:

Alcohol dependence refers to the use of alcoholic beverages to the point of causing damage to the individual and major health problems. so to increase the level of coping the virtual reality based awareness education which helps to improve the alcohol dependence clients and making better real life situations

MATERIALS AND METHODS:

The research approach selected for the study was a quantitative approach with Pre experimental one group pretest posttest research design. The 40 samples were selected through a Non-probability purposive sampling technique. Pretest was done with the modified Brief-COPE questionnaire. The virtual reality based awareness education was provided among clients with alcohol dependence for 7 mins which includes definition, coping mechanism, level of coping and coping strategies namely problem focused coping, Emotional focused coping and Avoidant coping. Posttest was done after 7 th day of intervention by using demographic variables and modified Brief-COPE questionnaire. The collected data were analysed based on the above mentioned objectives using descriptive and inferential statistics.

RESULT :

In frequency and percentage distribution of demographic variables among clients with alcohol dependence, most of clients with alcohol dependence, 17(42.5%) were aged between 36 – 46 years, 40(100%) were male, 21(52.5%) were Christians, 15(37.5%) had secondary education, 19(47.5%) were unmarried, 17(42.5%) belonged to joint family, 16(40%) were private employee and had income of Rs.10,001 – 20,000, 15(37.5%) were consuming alcohol for 7 – 9 years, 17(42.5%) were living in urban area and 22(55%) had no family history of alcohol dependence. In frequency and percentage distribution of pretest and posttest level of coping among clients with alcohol dependence, in the pretest among clients with alcohol dependence, 40(100%) had moderate level of coping and in the post test after the intervention 28(70%) had moderate level of coping and 12(30%) had high level of coping. In Comparison of pretest and posttest level of coping among clients with alcohol dependence, in the pretest mean score of coping was 51.97 ± 3.77 and the posttest mean score of coping was 71.95 ± 10.68 . The mean difference score was 19.97. The calculated paired 't' test value of $t=11.573$ was found to be statistically significant at $p < 0.001$ level. This clearly infers that Virtual Reality Based Awareness Education on level of coping administered to the clients with alcohol dependence was found to be effective in increasing the level of coping among them in the posttest. Hence hypothesis H1 was accepted. It was evident that virtual reality based awareness education brings improvement in level of coping clients with alcohol dependence. In this study, the result indicated that there was significant association found between the pretest level of coping among clients with alcohol dependence with the selected demographic variables such as Age. Hence the research hypothesis H2 was accepted.

CONCLUSION:

The result of this study concluded that the virtual reality based awareness education was effective in improving the level of coping among clients with alcohol dependence.

KEYWORDS:

Virtual reality based awareness education, level of coping, alcohol dependence clients.

Original title

EFFECTIVENESS OF PSYCHO EDUCATION ON STRESS AMONG MOTHERS OF EPILEPTIC CHILDREN IN SELECTED HOSPITALS

Prof. Dr. Chandraleka. E Department of Child Health Nursing,

BACKGROUND:

Chronic disease is defined as a continuous, slow-progressing condition that lacks a complete recovery and often causes permanent disabilities, disabilities and has serious effects on the general lifestyle of the patient. Epilepsy ranks second among the chronic childhood diseases after insulin-dependent diabetes mellitus.

MATERIAL AND METHODS:

A Quantitative research approach and true experimental one group pre-test post-test design was used to conduct the study at selected hospital. 50 mothers of epileptic children with Selected hospital, Puducherry through non probability purposive sampling technique. Oral and written consent was obtained from the study samples and the data was collected with demographic variables, perceived stress scale through the after the pre-test psycho education applied 2 hours per week . In the dependent group to analyse the data.

RESULTS:

The study result shows that majority of 50% of mothers of epileptic children had moderate stress, 46% of mothers of epileptic children had mild stress, 2% of mothers of epileptic children had severe stress and mothers had no stress. pre-test and standard deviation score were 12.5 ± 11.52 and post -test mean and standard deviation score was 12.5 ± 12.01 the calculated t value of 15.8 which was greater than the tabulated value at $p < 0.05$ level.

KEY WORDS:

Stress among mothers of epileptic children, perceived stress scale.

Original title

EFFECTIVENESS OF SELECTED YOGA ON HEART RATE AMONG PATIENTS WITH HYPERTENSION IN SELECTED HOSPITAL AT PUDUCHERRY

Prof. Dr. Chandralekha. K Department of Medical Surgical Nursing.

BACKGROUND:

Hypertension is one of the major risk factor to develop the cardiovascular disease and it has now become a global pandemic, rapidly increasing in developing countries like India. The present scenario alarms that high blood pressure is the major cause of death in all over the world. Yoga is a life based practice and one of the simple intervention to manage the heart rate that includes selective yoga postures, breathe control and meditation.

MATERIAL AND METHODS:

A quantitative quasi experimental with pretest, posttest and control group design was used for the study. The study were conducted at SVMCH&RC, totally 200 samples were selected by using convenience sampling technique for both the groups. The study comprised of the patients with hypertension aged between 40-60 years.

The structured questionnaires and standardized tools were used to gather demographic and clinical data of the patients. The investigator taught about hypertension and selected yoga for 45 minutes using lecture cum discussion and demonstration method. The samples were requested to give a return demonstration and correction was made on the first day of intervention. From the next day onwards the samples were instructed to perform yoga in the morning for 30 minutes for six days under the supervision of the investigator and follow up was done in the home for any five days per week for three months. The post-test was done at the end of third month (12th week) by using the same questionnaires and tools.

RESULTS:

The result of the present study show those 12 weeks of selected yoga therapy was the effective strategy to maintain the normal range of heart rate. The reduction of HR score from pre-test to post-test (82.34 ± 5.36 vs 74.06 ± 4.94 , mean difference was 8.28), which was statistically significant ($p \leq .05$) than the control group (81.75 ± 5.71 vs 81.11 ± 5.88 , MD 0.64).

The overall mean reduction score of heart rate was 8.28 (10.05%), which indicated statistically high positive improvement in study group patients comparing to control group. Therefore, it was concluded that a yoga practices were maintain the heat rate. The significance association was also found in between heart rate and demographic variables in younger aged and male patients ($F=2.74$ $p=0.05^*$, $t=5.03$ $p=0.001^{***}$) than other patients. The results of the study proved that the yoga was very much effective to maintain the heart rate at normal level.

KEY WORDS:

hypertension, yoga, heart rate

Original title

EFFECT OF STUDENT EDUCATIONAL ENHANCEMENT PROGRAMME (SEEP) ON STUDY SKILLS OF NURSING STUDENTS NEEDING ADDITIONAL CURRICULAR AND PSYCHOLOGICAL SUPPORT AT SELECTED COLLEGES.

Prof. Dr. Jayanthi. K Department of Mental Health Nursing.

BACKGROUND:

Transition from secondary school to higher education often presents challenges, particularly for nursing students who may face additional difficulties impacting their learning and study skills. Recognizing and addressing these challenges is crucial for facilitating effective learning and improving study skills among students needing additional curricular and psychological support. The purpose of this study is to assess the efficacy of the Student Educational Enhancement Programme (SEEP), on study skills among nursing students needing additional curricular and psychological support. The study also correlated their effectiveness and associated study skills, with selected demographic variables.

MATERIAL AND METHODS:

A true experimental design was employed to assess the effectiveness of the Student Educational Enhancement Programme (SEEP) on the study skills of first-year B.Sc. (Nursing) students in Puducherry. The SEEP comprised structured group counseling, facial reflexology, and INFINITI mind mapping learning. Pretest and post-test data were collected from study and control groups using standardized instruments. Statistical analyses, correlation and association tests, conducted to evaluate intervention's impact and to explore relationships with demographic variables.

RESULTS:

The study group demonstrated significant improvements in study skills (13.49% increase), compared to marginal improvements in the control group. Positive correlations were observed between the intervention and study outcomes in the study group, emphasizing its efficacy.

CONCLUSION:

Therefore, the Student Educational Enhancement Programme (SEEP) is considered as important in nursing education for enhancing study skills, among nursing students needing additional curricular and psychological support.

KEYWORDS:

Facial reflexology, INFINITI mind mapping learning, Nursing students, Student Educational Enhancement Programme, Structured group counseling, Study skills.

Original title

KNOWLEDGE ON COVID-19 VACCINATION AMONG ANTENATAL MOTHERS ATTENDING ANTENATAL CLINIC IN MGMCRI, PUDUCHERRY.

Mrs. Lourdu Maria Kalpana, Department of Obstetrics and Gynaecological Nursing

BACKGROUND:

COVID-19 during pregnancy is linked to an increased risk of pregnancy problems. With periodic outbreaks expected in the future, excluding pregnant women from immunization may result in a disproportionately greater cost being carried by this vulnerable group and their children. This must be weighed against the dangers of immunization. Given the speed with which new knowledge emerges, it is critical for healthcare professionals to stay current on new discoveries and recommendations. The aim of this study was to assess the knowledge on COVID-19 vaccination among Antenatal Mothers attending Antenatal clinic in MGMCRI at Puducherry.

MATERIAL AND METHODS:

A descriptive research design was adopted for the study. The populations of the present study are Antenatal Mothers attending Antenatal clinic in Mahatma Gandhi Medical College Research Institute, Puducherry. 60 Antenatal Mothers were selected with non-probability purposive sampling technique was adopted socio-demographic variables and knowledge on COVID -19 vaccination among Antenatal Mothers attending Antenatal clinic were assessed by using self-structured knowledge questionnaire. There data was analyzed through descriptive statistics (mean, frequency, percentage, and standard deviation) and inferential statistics (Chi-square test).

RESULTS:

The result shows Majority of the Antenatal Mothers, 44 (73.3%) had moderately adequate level of knowledge, 16 (26.7%) had adequate level of knowledge and socio demographic variable Gravida and Source of information about COVID-19 vaccination had shown statistically significant association between level of knowledge on COVID vaccination among Antenatal Mothers attending Antenatal clinic with chi-square value of $p < 0.05$ level.

CONCLUSION:

The study concludes that majority of the Antenatal Mothers had moderately adequate level of knowledge regarding COVID -19 vaccination. The results of this study could help to bridge the Knowledge gap on COVID-19 vaccination among Antenatal Mother is considered the first stepping stone to any health education activity that is implemented. The findings may help to support and boost up the vaccination drive in present health care system in India.

KEYWORDS:

Antenatal Mothers, Knowledge on COVID-19 Vaccination, Antenatal clinic.

Original title

EFFECTIVENESS OF TAILOR MADE INTERVENTION FOR PREGNANCY RELATED PELVIC GIRDLE PAIN AND FUNCTIONAL STATUS AMONG ANTENATAL MOTHERS AT A SELECTED HOSPITAL, PUDUCHERRY.

Ms. Abirami. L, Prof. Jamuna Rani. G Department of Obstetrics and Gynaecological Nursing

BACKGROUND:

Pelvic Girdle Pain (PGP) is a common musculoskeletal disorder during pregnancy, primarily affecting the back of the pelvis. It causes significant discomfort and disability, limiting daily activities and lowering the quality of life. PGP also has psychosocial implications, including longer work leave, poor quality of life, and social impact, as it is one of the leading causes for pregnant women quitting their jobs. Additionally, some women fear that PGP may lead to chronic conditions. Therefore, addressing PGP and providing appropriate interventions during pregnancy is crucial to improve the quality of life of expectant mothers.

MATERIALS AND METHODS:

A quasi-experimental, non-randomized pre-test-post-test design was used for this study. Antenatal mothers with pregnancy-related pelvic girdle pain, meeting the inclusion criteria, were selected through non-probability sampling techniques. The sample consisted of 50 antenatal mothers, with 25 in the study group and 25 in the control group. The pre-test was conducted using a Numerical Pain Rating Scale to assess pelvic girdle pain and a Modified Functional Status Assessment Scale to evaluate functional status. Tailor-made interventions were provided only to the study group, which involved specific exercises and techniques to reduce pain and improve functional status. The control group received routine care and home remedies. Both groups were re-assessed using the same tools 15 days after the intervention (post-test). Descriptive and inferential statistics were used for data analysis.

RESULTS:

The result showed that, in pre-test level of pregnancy related pelvic girdle pain in the study group, 17(68%) had severe pain. Whereas in post-test, no one of them felt severe pain. In the control group, 13(52%) had severe pain in pre-test and 11(44%) had felt severe pain in post-test. Regarding functional status, in pre-test level in the study group, 15(60%) had moderately limited functional status. Whereas in post-test, 22(88%) had moderately limited functional status. In the control group, 17(68%) had moderately limited functional status and 8(32%) had severely limited functional status in both pre-test and post-test. Regarding effectiveness of tailor made intervention, the result showed that, in post-test mean and SD scores of pregnancy related pelvic girdle pain between the study and control group were 3.52+1.44, 6.76+1.12 and the calculated 't' value was 8.829 at the 'p' level of <0.001. Regarding functional status, the post-test mean and SD scores between the study and control group were 34.36+4.46, 54.20+2.91 and the calculated 't' value was 18.612 at the 'p' level of <0.001. This clearly shows that, the tailor made intervention was very effective in reducing the level of pregnancy related pelvic girdle pain and improving the functional status among antenatal mothers. Based on correlation between pregnancy related pelvic girdle pain and functional status, the result showed that in the study group, the post-test mean and SD scores were 3.52+1.44, 34.36+4.46 and the calculated 'r' value was 0.499 at the 'p' level of <0.05. Whereas in the control group, the post-test mean and SD scores were 6.76+1.12, 54.20+2.91 and the calculated 'r' value was 0.149 at the 'p' level of <0.05. This clearly shows that, there is a significant positive correlation found between pregnancy related pelvic girdle pain and functional status among antenatal mothers. There is a significant association found in the weight in kgs and gestational age with the pre-test level of pregnancy related pelvic girdle pain and functional status among antenatal mothers in selected demographic and clinical variables.

CONCLUSION:

The study concludes that tailor-made interventions are highly effective in reducing pregnancy-related pelvic girdle pain and improving the functional status of antenatal mothers. The positive outcomes emphasize the importance of providing personalized care to manage musculoskeletal discomfort during pregnancy.

KEYWORDS:

Tailor-made intervention, Pregnancy-related pelvic girdle pain, Functional status, Antenatal mothers, Musculoskeletal disorders, Pregnancy care.

Original title

EFFECTIVENESS OF TAILOR MADE INTERVENTION FOR PREGNANCY RELATED PELVIC GIRDLE PAIN AND FUNCTIONAL STATUS AMONG ANTENATAL MOTHERS AT A SELECTED HOSPITAL, PUDUCHERRY.

Ms. Abirami. L, Prof. Jamuna Rani. G Department of Obstetrics and Gynaecological Nursing

BACKGROUND:

Pelvic Girdle Pain (PGP) is a common musculoskeletal disorder during pregnancy, primarily affecting the back of the pelvis. It causes significant discomfort and disability, limiting daily activities and lowering the quality of life. PGP also has psychosocial implications, including longer work leave, poor quality of life, and social impact, as it is one of the leading causes for pregnant women quitting their jobs. Additionally, some women fear that PGP may lead to chronic conditions. Therefore, addressing PGP and providing appropriate interventions during pregnancy is crucial to improve the quality of life of expectant mothers.

MATERIALS AND METHODS:

A quasi-experimental, non-randomized pre-test-post-test design was used for this study. Antenatal mothers with pregnancy-related pelvic girdle pain, meeting the inclusion criteria, were selected through non-probability sampling techniques. The sample consisted of 50 antenatal mothers, with 25 in the study group and 25 in the control group. The pre-test was conducted using a Numerical Pain Rating Scale to assess pelvic girdle pain and a Modified Functional Status Assessment Scale to evaluate functional status. Tailor-made interventions were provided only to the study group, which involved specific exercises and techniques to reduce pain and improve functional status. The control group received routine care and home remedies. Both groups were re-assessed using the same tools 15 days after the intervention (post-test). Descriptive and inferential statistics were used for data analysis.

RESULTS:

The result showed that, in pre-test level of pregnancy related pelvic girdle pain in the study group, 17(68%) had severe pain. Whereas in post-test, no one of them felt severe pain. In the control group, 13(52%) had severe pain in pre-test and 11(44%) had felt severe pain in post-test. Regarding functional status, in pre-test level in the study group, 15(60%) had moderately limited functional status. Whereas in post-test, 22(88%) had moderately limited functional status. In the control group, 17(68%) had moderately limited functional status and 8(32%) had severely limited functional status in both pre-test and post-test. Regarding effectiveness of tailor made intervention, the result showed that, in post-test mean and SD scores of pregnancy related pelvic girdle pain between the study and control group were 3.52+1.44, 6.76+1.12 and the calculated 't' value was 8.829 at the 'p' level of <0.001. Regarding functional status, the post-test mean and SD scores between the study and control group were 34.36+4.46, 54.20+2.91 and the calculated 't' value was 18.612 at the 'p' level of <0.001. This clearly shows that, the tailor made intervention was very effective in reducing the level of pregnancy related pelvic girdle pain and improving the functional status among antenatal mothers. Based on correlation between pregnancy related pelvic girdle pain and functional status, the result showed that in the study group, the post-test mean and SD scores were 3.52+1.44, 34.36+4.46 and the calculated 'r' value was 0.499 at the 'p' level of <0.05. Whereas in the control group, the post-test mean and SD scores were 6.76+1.12, 54.20+2.91 and the calculated 'r' value was 0.149 at the 'p' level of <0.05. This clearly shows that, there is a significant positive correlation found between pregnancy related pelvic girdle pain and functional status among antenatal mothers. There is a significant association found in the weight in kgs and gestational age with the pre-test level of pregnancy related pelvic girdle pain and functional status among antenatal mothers in selected demographic and clinical variables.

CONCLUSION:

The study concludes that tailor-made interventions are highly effective in reducing pregnancy-related pelvic girdle pain and improving the functional status of antenatal mothers. The positive outcomes emphasize the importance of providing personalized care to manage musculoskeletal discomfort during pregnancy.

KEYWORDS:

Tailor-made intervention, Pregnancy-related pelvic girdle pain, Functional status, Antenatal mothers, Musculoskeletal disorders, Pregnancy care.

Original title

NEUROBIOLOGICAL UNDERPINNINGS OF SCHIZOAFFECTIVE DISORDER IN FULL REMISSION

Mrs. Hema Pooja. V Tutor,

BACKGROUND:

Schizoaffective disorder is a mental condition characterized by a combination of schizophrenia symptoms, such as hallucination or delusions and mood disorder symptoms, like depression or mania. The DSM-5 provides specific criteria for diagnosing Schizoaffective Disorder.

CRITERIA -A: An uninterrupted period of illness during major mood episodes (major depression or mania) concurrent with criteria A of schizophrenia.(Delusion, Hallucination, Disorganised speech, catatonic behavior, negative symptoms).

CRITERIA -B: Delusions or Hallucinations for 2 or more weeks in the absence of a major mood episode (depressive or manic) during the lifetime duration of the illness.

CRITERIA -C: Symptoms that meet criteria for a major mood episode are present for the majority of the total duration of the active and residual portions of the illness.

CRITERIA -D: The disturbance is not attributable to the effects of a substance (e.g., a drug of abuse, a medication) or another medical condition. The Neurobiological underpinnings of schizoaffective disorder are complex and multifactorial, involving genetics , neuroanatomical and neuro chemical factors. Schizoaffective disorder (SAD), with "full remission" refers to a period during which the symptoms of the disorder are absent or minimal and do not significantly interfere with the individual's daily functioning.

CONCLUSION:

This case highlights the importance of neurobiological assessment in understanding and managing schizoaffective disorder. Neuroimaging findings provided critical insights into the structural and functional brain abnormalities contributing to the patient's symptoms.

A comprehensive treatment approach incorporating pharmacotherapy, psychotherapy, and neurofeedback therapy led to significant clinical improvement. Ongoing research into the neurobiological underpinnings of schizoaffective disorder is essential for developing more effective and personalized treatment strategies.

This expanded report includes more in-depth information on the patient's background, clinical presentation, detailed neuroimaging findings, and a thorough discussion of the neurobiological aspects contributing to the disorder.

KEYWORDS:

Schizoaffective disorder, prefrontal cortex, temporal lobes, neurobiology, neuroimaging, suspiciousness.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF GESTATIONAL DIABETES MELLITUS AMONG ANTENATAL MOTHERS AT SELECTED HOSPITALS, PUDUCHERRY.

Karthikeyan. S, Thivyaa. S, Lakshmipriya. A, Gomathi. S, Yuvaraj. M, Ranjith. M, Roselin. J, Priyadarshini. S, Sooriyamithra, Vijayasanthi, GUIDE: Mrs. Amudha. G,,
Department of Obstetrics and Gynaecological Nursing.

BACKGROUND:

Gestational diabetes mellitus (GDM) is a common pregnancy complication characterized by glucose intolerance that first appears or diagnosed during pregnancy. This condition poses significant health risks to both the mother and her fetus. For the mother, GDM increases the likelihood of cesarean delivery, preeclampsia, and the eventual development of type 2 diabetes. For the fetus, the risks include macrosomia (excessive birth weight), neonatal hypoglycemia, and long-term metabolic complications. The global rise in GDM prevalence underscores the urgent need for effective preventive strategies.

MATERIALS AND METHODS:

In this study quantitative research approach was adopted for this study. An experimental one group pre testpost test research design was adopted . The study was conducted at selected hospitals. 30 samples were collected by convenient sampling technique. The Effectiveness of planned teaching programme on Knowledge regarding prevention of Gestational diabetes mellitus among antenatal mothers was assessed by knowledge assessment questionnaire. The collected data was tabulated and analyzed by experimental and inferential statistics.

RESULT:

The result showed that highest percentage of antenatal mothers belongs to Age group of < 26 - 30 years 14(46.7%), Primipara16(53.3%), Higher secondary educational status of antenatal mothers 12(40%), 29(96.7%) had Family history of DM. In pretest, Majority of antenatal mothers 19(63.3%) had inadequate and 11(36.7%) had moderately adequate.

In post- test, Majority of antenatal mothers 28(93.3%) had adequate and 2(6.7%) had moderately adequate. The mean and standard deviation of Planned teaching programme on the level of knowledge regarding prevention of gestational diabetes mellitus among antenatal mothers is 27.13 ± 2.446 .

CONCLUSION:

We conclude that this study with recommendation that all antenatal mothers had given a planned teaching programme on prevention of gestational diabetes mellitus .So that, they can able to gain adequate knowledge regarding the topic.

KEY WORDS:

Gestational Diabetes Mellitus, Knowledge, Planned teaching programme, effectiveness, Antenatal mothers.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE AND ATTITUDE OF CERVICAL CANCER AMONG ADOLESCENTS GIRLS PUDUCHERRY

Jambugheshwaran.K, Nithishkumar.S, Vishvasri.M, Gnanarajasoundari.G, Kowsalya, Priya.V, Rishika.J, Shobana.A, Thishiya.M, Shobana.A, GUIDE: Mr. Thirivikkiraman, Department of Community Health Nursing

BACKGROUND: A study to assess the effectiveness of structured teaching programme regarding knowledge and attitude cervical cancer among adolescents girls, Puducherry.

MATERIALS AND METHODS: The design adopted for the study was Pre-experimental, one group pretest and post-test design to assess the effectiveness of structured teaching programme regarding knowledge and attitude on cervical cancer among adolescents girls. Convenient sampling technique was used to select 100 adolescent girls at college, Puducherry. Pre-test was done with a structured knowledge questionnaires and after structured teaching programme and information pamphlets were given to adolescent girls. On 7th day post test was conducted for the same group with the same structured knowledge questionnaires.

RESULT: In this study results indicates the pre-test level of knowledge and attitude on cervical cancer among adolescents girls., should had inadequate level of knowledge 17(90%), had moderate level of knowledge 2(6.66%), had adequate level of knowledge 1(3.33%). In this study the post-test level of knowledge, and attitude on cervical cancer among adolescent girls should had moderate level of knowledge 18(60%), had adequate level of knowledge 9(30%), and had inadequate level of knowledge 3(10%). Overall pre-test and post-test knowledge score on knowledge and attitude on cervical cancer among adolescent girls. pre-test mean knowledge score was 10 & SD-2.97 and post-test mean knowledge score was 17 & SD 3.14. The overall pre-test & post-test knowledge score knowledge and attitude on cervical cancer among adolescent girls. In pre-test mean knowledge score was 10(3.33%). In post-test knowledge score were 17(56.6%). Further the obtained "t" values was 9.74. Which is statistically found to be significant at $P < 0.05$ level. Therefore, H_1 accepted, H_0 is rejected. In the study result there is significant different between pre-test and post-test knowledge score of structured teaching programme regarding knowledge and attitude on cervical cancer among adolescents girls and there is no association between post-test level of knowledge and the selected demographic variables. Hence the research hypothesis H_0 was rejected.

CONCLUSION: The present study assessed the effectiveness of structured teaching programme regarding knowledge and attitude on cervical cancer among adolescents. The finding of the study concluded that there was significant different between pre-test and post test knowledge score of adolescents girls were effective for structure teaching programme regarding prevention of cervical cancer. Majority of moderate knowledge.

KEY WORDS: Structured teaching programme, Knowledge and Attitude of Cervical Cancer among adolescent girls.

Original title

A STUDY TO ASSESS THE EMOTIONAL INTELLIGENCE ON ACADEMIC PERFORMANCE AMONG NURSING STUDENTS OF SELECTED NURSING COLLEGE, PUDUCHERRY.

Amudhavanan. G, Kowsick basha. K, Santhanumar. I, Adhiswari. R, Iyswarya. N, Logeshwari. D, Priyadharshini. S, Rujendri. S, Varsha. S, Sowmiya. S, GUIDE: Prof. Dr.Chandralekha. K,
Department of medical surgical Nursing

BACKGROUND: Emotional intelligence is the ability to understand, use and manage own emotions in positive ways to relieve stress, communicate effectively, empathize with others, overcome challenges and defuse conflict. Emotional intelligence may influence the life, from academic performance with good satisfaction level. When it comes to academic performance, research as received emotional intelligence is as important as cognitive intelligence is a conscientious attitude. High level of emotional intelligence is necessary for the profession of the nursing for better performance. The traditional nursing programme admission criteria focus on academic scores, but the student's emotions ability is missed.

MATERIALS AND METHODS: Quantitative descriptive design was implemented to assess the emotional intelligence on academic performance among nursing students. The study population was 100 baccalaureate nursing students, and they were selected by non probability convenience sampling technique. The data collection instruments include demographic variables such as age, gender, education of parents, occupation of parents, family monthly income, type of family, ordinal position and area of living. Structured questionnaire on Emotional Intelligence adapted from Sterrett's EI questionnaire and academic performance of nursing students.

RESULT:

The result of the study indicates the frequency and percentage wise distribution of demographic variables among nursing students. According to study majority of the nursing students were female (60%), while males accounted for 40%. Most students religion were Hindu (75%), followed by Muslim (13%) and Christian (12%). No students belonged to other religions. The largest proportion of students had parents with a Higher Secondary School education (49%), followed by graduates (37%). A smaller percentage had parents with only a Primary School education (13%), and very few had illiterate parents (1%). A diverse distribution was observed in parental occupations, Government jobs (33%) were the most common, Business (24%) and other occupations (34%) were also significant, Agriculture was the least common occupation (9%). Family Monthly Income, A majority (38%) of students' families earned less than 10,000 per month, 25% had a family income between 10,000-15,000, Fewer students belonged to families earning ₹15,000-220,000 (19%) and more than 220,000 (18%). Here most students came from nuclear families (69%), Joint families (20%) and separated families (11%) were less common. The highest proportion of students were second-born children (50%), First-born students accounted for 39%, while only children were 8%, Very few were third-born or beyond (3%). The majority of students resided in urban areas (46%), 38% were from rural areas, while 15% lived in semi-urban areas and only 1% in semi-rural areas.

CONCLUSION:

The present study to assess the level of emotional intelligence on academic performance among Nursing students. The result shows in Majority of the vaccinated adults 26(26%) had Emotional intelligence growing and 74(74%) had High emotional intelligence and the mean and standard deviation the level of emotional intelligence on academic performance among Nursing students is (33.32+5.5). These results suggest that emotional intelligence plays a crucial role in academic performance among nursing students. Higher EI levels may contribute to improved stress management, decision-making, communication skills, and adaptability, which are essential for academic success and future professional practice. Integrating EI training into nursing curricula and fostering emotional resilience can further enhance students' learning experiences and clinical.

KEYWORDS:

Emotional Intelligence, Academic performance, Nursing students.

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KEYWORDS:

Emotional Intelligence, Academic performance, Nursing students.

Original title

A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE REGARDING HEATSTROKE AND ITS PREVENTION AMONG FARMERS AT SELECTED AREA, PUDUCHERRY

Abirami. S, Hemalatha. I, Lavanya. M, Rubitha. K, Soundarya. I, Priyadarshini. V, Vanitha. M, Sanjay. V, Kevin Paul Varilh, Mathivathani, GUIDE: Mrs. Manju,
Department of Community Health Nursing,

BACKGROUND:

Heatstroke is a severe and potentially fatal condition caused by the body's inability to regulate temperature in extreme heat. It occurs when the core body temperature rises above 104-degree Fahrenheit, leading to neurological dysfunction and systemic complication. Common symptoms include confusion, rapid heartbeat, hot and dry skin, and loss of consciousness. Risk for developing heatstroke include prolonged heat exposure, dehydration, strenuous physical activity, and certain medical conditions. Immediate treatment involves rapid cooling, hydration, and emergency medical care. Preventive measures such as staying hydrated, avoiding excessive heat exposure, wearing appropriate clothing can reduce the risk. Heatstroke is a medical emergency that requires urgent intervention to prevent organ failure and death.

MATERIAL AND METHODS:

According to the statement of the problem and objectives of the study, pre- experimental study (one group pre-test-post-test design) was adopted. In this study, 60 samples of farmers were selected by non-probability convenient sampling technique. Data was analyzed using descriptive statistics by percentage, mean and inferential statistics by chi square test.

RESULTS:

Of the total sample, the majority of adequate knowledge towards heatstroke and its prevention were 91.7%, moderate knowledge towards heatstroke and its prevention were 8.3% and inadequate knowledge towards heatstroke and its prevention were 0%. Overall mean pre-test post-test values were 7.28 and 20.77, standard deviation pre-test post-test values were 0.37 and 3.321 and P value is < 0.05 (Significance) revealed that farmers had gained adequate knowledge among heatstroke.

CONCLUSION:

In this study, the farmers had gained knowledge regarding heatstroke and its prevention, with the help of structured teaching program. The structured questionnaire was prepared to assess the level of knowledge. A structured questionnaire was used to collect the data from the subjects. The data collected were analyzed and interpreted in terms of research objectives with the guidance of specialist and statistical experts.

KEYWORDS:

Knowledge, heatstroke, prevention

Original title

A STUDY TO ASSESS THE KNOWLEDGE AND ATTITUDE REGARDING RESPECTFUL MATERNITY CARE AMONG SELECTED"

Bavan. F, Jamuna. C, Anbuvizhi. S, Sivabalan. S, Meena. R, Ramya. D, Sameera. B, Swetha. K, Vasanthi. R, Krishnaraj. K, GUIDE: Prof.Dr.Jamunarani, Department of obstetrics and gynaecology Nursing, Indirani college of nursing.

BACKGROUND:

As per the survey of 1.2 million women from more than half of the world's countries, what they wanted most was to be treated with respect and dignity from re-productive and maternal health services.

MATERIAL AND METHODS:

In this study quantitative research approach was adopted for this study. A descriptive research design was adopted for this study. Respectful Maternity Care among B.Sc. Nursing IV-year students. The study was conducted at selected college at Puducherry. There were 250 nursing students for this study, convenient sampling technique was done.

Result:

Overall pre-test and post-test knowledge and attitude score regarding Respectful Maternity Care among B.Sc. Nursing students in 13.01 and -7.94. It found the statistically significant at $P < 0.001$ and also showed the effectiveness of planned teaching programme.

CONCLUSION:

The experimental study was used to assess the effectiveness of Planed teaching programme on knowledge and attitude regarding Respectful Maternity Care among B.Sc. Nursing final year students in selected college at Puducherry. The calculated t value in level of knowledge and attitude between the study and control group was 13.01 and -7.94. It found to be statistically significant at $p < 0.001$. The result of this study concluded that the planned teaching programme was effective in enhancing the knowledge to bring positive attitude regarding Respectful Maternity Care among B.Sc. Nursing final year students in selected college at Puducherry.

KEY WORDS:

Respectful Maternity Care, Knowledge, Attitude. Planned Teaching Programme. Effectiveness.

Original title

PREVALENCE, KNOWLEDGE AND ATTITUDE OF HYPERTENSION AMONG ADULTS AT SELECTED VILLAGE

Brine Mathew Rambudal. R, Krishnna. U, Sriman. P, Aruna. S, Kakaivizhi. A, Monisha. V, Ranjana. V, Sandhiya. M, Srimathi. S, Velvizhi. V **GUIDE : Prof. Dr. Rathidevi. S**
Department of Community Health Nursing,

BACKGROUND:

Hypertension commonly known as a silent killer disease is one of the major diseases that's taking the lives of millions of people globally every year. It is a risk factor for cardiovascular disease posing a major public health challenges and a worldwide health disorder, Inspiration among the young adults and participation in lifestyle modification is essential to control this deadly silent disease.

MATERIAL AND METHODS:

A descriptive study on the prevalence, knowledge and attitude regarding hypertension was conducted among young adults of Ariyur village, Puducherry. 100 samples were selected by simple random sampling method. Prevalence was assessed by measuring blood pressure by sphygmomanometer, knowledge and attitude on hypertension were assessed using structured questionnaire. The collected data was tabulated and analyzed using descriptive and inferential statistics.

RESULTS:

The results showed that 32% of adults had prehypertension, 21% of adults had grade I hypertension, whereas 10% of adults had grade II hypertension and only 8% of adults comes under grade III hypertension. 70% (70) of adults had moderately adequate knowledge regarding hypertension and 29%(29) of adults had adequate knowledge. 13% (13) adults had showed favorable attitude towards hypertension. There is no significant correlation between knowledge and attitude on hypertension among adults ($r = 0.085, p < 0.5$).

The selected demographic variables such as marital status and annual income had positive significant association with the level of prevalence. The selected demographic variables such as personal habits had positive significant association with the level of knowledge. The selected demographic variables such as annual income and marital status had positive significant association with the level of attitude.

CONCLUSION:

We conclude this study with the recommendation that all the young adults should be given an interactive awareness session on prevention of hypertension as early as possible so that they can practice the healthy lifestyle and protect themselves from this silent killer disease.

Keywords: Knowledge, Prevalence and Hypertension.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE REGARDING PREVENTION OF POLYCYSTIC OVARIAN DISEASE AMONG ADOLESCENT GIRLS AT SVCET, ARIYUR, PUDUCHERRY

Devilal.B, Mithunraj.S, Thamizhselvan.M, Devayani.A, Kaviya.M, Nasrin begam.I, Reshma.R, Shalini.R, Sugapriya.K, Viji.M, GUIDE: Prof. Dr. Jayanthi. K Department of Mental Health Nursing.

BACKGROUND:

Adolescent is a period of rapid development that begins with puberty and lasts until the age of 20 years. Polycystic ovarian disease is the most common endocrine disorder among women between the ages of 18-44.

MATERIAL AND METHODS:

Quantitative research approach was adopted for this study. A pre-experimental pretest and post test only design was adopted for this study. Sample size were 40 girls, convenient sampling technique was done. The intervention used in this study was video assisted teaching program regarding the knowledge of polycystic ovarian disease among adolescent girls.

RESULTS:

Overall pre-test and post test knowledge score on prevention of PCOD among adolescent girls pre test mean knowledge score was 7.95 and SD 3.046 and post-test mean knowledge score was 17.28 and SD-3.35. It found the statistically significant at $P < 0.001$ and also showed the effectiveness of video assisted teaching programme.

CONCLUSION:

The results of the study concluded that the awareness programme was effective and the adolescent girls gained knowledge regarding prevention of polycystic ovarian disease among adolescent girls.

KEY WORDS:

Video Assisted Teaching, Polycystic Ovarian Disease, Adolescent Girls.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF LAND BASED EXERCISE TO REDUCE PAIN AMONG ELDERLY PERSON WITH OSTEOARTHRITIS KNEE AT SELECTED AREA PUDUCHERRY

Gurunathan.G, Nafees.A, Vimalraj.A, Evelin andriyamendiz, Komagal.K, Poojakumari, Revathy.M, Shifaya fatima.Js, Swetha.J, Visali.D, GUIDE: Mrs. Kalpana.
Department of Community Health Nursing

BACKGROUND:

People with symptomatic knee osteoarthritis (OA) complain of deep, aching pain. In early disease, pain is intermittent and mostly associated with joint use. For many people, symptomatic disease will progress. The knee pain becomes chronic, often also present at rest and during the night.

MATERIAL AND METHODS:

The research approach selected for the study is quantitative approach quasi experimental One group pre test – Post test research design through probability Simple random sampling technique, 30 clients were selected demographic and clinical variables were collected by using a questioner method and the level of pain was assessed by using numerical pain rating scale Pre test was conducted by using numerating pain rating scale And the researcher performed the land based exercise to the group the intervention given for 20 minutes once a day for one week. Post test was conducted on the 7th day of land based exercise. The collected data were analyzed based on the above mentioned objectives using descriptive statistics.

RESULTS:

In this study, the existing level of pain in pre test The majority 30 (75%) Of osteoarthritis patient had mild pain and only 10(25%) Of osteoarthritis patient had moderate pain.

The post test shows that majority of 33(82.5%) both osteoarthritis had mild pain and only 7(17.5%) had no pain.

In mean score, SD in pretest 3.03 ± 0.698 and in post test was 1.58 ± 0.501 .

Hence the research hypothesis H1 was accepted.

It was evidenced the land based exercise was effective on reduction of Knee pain among client with knee osteoarthritis. The pain score reveals that in the demographic and clinical variables has not shown any statistically significant association with the level of pain among patients with osteoarthritis in the selected group.

CONCLUSION:

The study conducted that the land based exercise had significant effect by reducing knee pain were effective in the reduction of pain among clients with knee osteoarthritis.

KEY WORDS:

Effectiveness, Land Based Exercise, Osteoarthritis.

Original title

ASTUDY TO ASSESS THE EFFECTIVENESS OF EDUCATION INTERVENTION PROGRAM ON LEVEL OF KNOWLEDGE REGARDING SEXUAL ABUSE AMONG ADOLESCENCE AT SELECTED VILLAGES OF PUDUCHERRY

Christopher. M, Logesh. S, Syed, Charumathi, Santhanalakshmi, Subalakshmi, Rekha, Mugila, Karishma, Vijayalakshmi, GUIDE: Prof. Dr. Chandralekha. E,
Department of Child Health Nursing

BACKGROUND:

Sexual abuse among adolescence is inappropriate sexual behavior with the child under 18 years. It involves forcing or persuading a child under the age of 18 to take part in sexual activities, whether or not the child is aware of what is happened. Adolescence period is a crucial phase of life .Sexual abuse of children and adolescents is a significant public health problem and a violation of fundamental human rights including the right to life, right to protection from all forms of violence and the right to enjoy the highest attainable standard of health

Material and methods:

According to statement of the problem and objectives of the study, Quasi experimental study was adopted. 50 samples of adolescence [14 to 18 years] were selected by non probability, convenient sample technique were done. Data was analyzed using descriptive statistics by percentage, mean and inferential statistics by chi square test.

Results:

The total sample of experimental group majority of adequate knowledge towards sexual abuse were 20(80%) and moderate knowledge towards sexual abuse were 5(20%). The total sample of control group adequate knowledge towards sexual abuse were 3(12%), moderate knowledge were 19(76%) and inadequate knowledge towards sexual abuse were 3(12%)

Conclusion:

With the guidance of subject specialist and statistical experts, a structured questionnaire was used to collect data form the subjects. The structured questionnaire was prepared to assess the level of knowledge. The data collected were analyzed and interpreted in terms of research objectives.

Original title

A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING ON KNOWLEDGE AND PRACTICE REGARDING SELF BREAST EXAMINATION AMONG WOMEN IN ARIYANKUPPAM, PUDUCHERRY

Guhan.M, Mohanraj.D, Vijai.A, Diviyabharathi.R, Keerthika.L, Ninidha.K, Revathy.M, Sharmila.R., Suvedha.R, Vinisha.V, Guide:Mrs. Kavitha, Obstetrics and Gynaecology Nursing,

BACKGROUND:

Breast cancer is the malignant tumor that starts in the cells of the breast. It is the second most common cancer worldwide. It is the number one cancer in woman. There were 2,296,840 new cases of breast cancer in 2022 among women. Female gender is the strongest breast cancer risk factor.

MATERIAL AND METHODS:

In this study quantitative research approach was adopted for this study. A quasi experimental research design was adopted for this study. Effective video assisted teaching on self breast examination among women. The study was conducted at selected villages at Puducherry. There were 60 women for this study, convenient sampling technique was done.

RESULTS:

In this study results indicates the pretest level of knowledge regarding self breast examination among women at ariyankuppam, should had inadequate level of knowledge 35(58.3%), had moderate level of knowledge 17(28.3%), had adequate level of knowledge 8(13.4%). 9 In this study the post-test level of knowledge regarding self breast examination among women at ariyankuppam, should had moderate level of knowledge 19(31.7%), had adequate level of knowledge 41(68.3%).

Overall pre-test and post-test knowledge score regarding breast self examination among women at age group 25 – 45 years, pre-test mean knowledge score was 4.32+2.18 and post-test mean knowledge score was 8.35+1.61. Further the obtained "t" value was t=-13.41.

Keywords: Video assisted teaching, self breast examination.



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2024-2025

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SVMCH&RC PUBLICATIONS

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***Research
CMEs &
workshop
2024-2025***

CME of Central Research Committee



The Continuing Medical Education (CME) session titled " Research in ART: Gudelines and Current Scenario" was held on December 12th, 2024, under CRC, SVGI at Sai Auditorium at Sri Venkateshwaraa Medical College Hospital and Research Centre (SVMCRC) in Ariyur, Puducherry

DR. Mariano Mascarenhans , Director , Care Fertility LEEDS, UK , External expert , CRC ,SVGI, delivered the Talk

Research CME s of SVMCHRC

National Conference on "Transforming Medicine through Research: Opportunities & Challenges" was conducted by IQAC and Research Cell on 26.7.2025.

Resource persons were from AIIMS ,Delhi, RML Hospital Delhi, AIIMS Madurai and University of Madras Chennai. Discussions were on Foundation of Medical Research, Clinical trials and Evidence based medicine and Ethics in Clinical Research



Overview of Research Grant writing



The Continuing Medical Education (CME) session titled "Overview of Research Grant writing" was conducted on August 19th, 2024, at Sai auditorium ; Dr Adhishivam , Prof, JIPMER delivered the Talk at Sri Venkateshwaraa Medical College Hospital and Research Centre (SVMCRC) in Ariyur, Puducherry.

Research Methodology

The Continuing Medical Education (CME) session titled " Research Methodology : CME on Understanding Systematic Reviews and Meta Analysis was conducted on September 19th, 2024, The Chocharane Systematic Review group from CMC, Vellore were the resource persons.



SVDC

Date	Title of CME/Workshop	Dept & College
26.04.2024	Workshop on Prototype Design and Development	SVDC - Institution Innovation council
17.12.2024-18.12.2024	Mastering Research Methodology - The Key To Successful Research	SVDC - Research Committee
07.06.2024	Impact lecture Series - Transforming research from campus to corporate world through IPR	SVDC - Institution Innovation council
29.11.2024	Session on Problem Solving Ideation	SVDC - Institution Innovation council

ICON

DATE	TITLE OF CME/WORKSHOP	DEPT & COLLEGE
28.10.2024	ROLE OF IHEC IN NURSING RESEARCH	RESEARCH CELL, EDUCATION UNIT - ICON

SVDC

Date	Title of CME/Workshop	Dept & College
14 th March 2023	"Lack of research in India - physical therapist perspective" Presented by Prof. M. Paulraj, SVCOPT.	Scientific Forum, SVCOPT
11th February 2025	Research series: 1 "HOW TO IDENTIFY RESEARCH GAP & FORMULAION OF RESEARCH QUESTION" Presented by Prof. Dr. S. Jeyanthi, SVCOPT.	Scientific Forum, SVCOPT
29 th February 2025	Research series: 2 Overcoming the obstacles of Sample Size Determination in Healthcare Studies. Presented by Dr. Nalina Gupta, Professor, Department of Physiotherapy, Chitkara School of Health Sciences, Chitkara University, Punjab, India. Event Coordinated by Prof. Dr. S. Jeyanthi, SVCOPT	Webinar, SVCOPT

SVCPMS

1. Faculty Development Program in Research Methodology was conducted for SVCPMS faculty online (6 sessions) and offline on 23 rd December 2024.
2. Faculty Development Program in Scientific Writing was conducted on 13 th January 2025.

The page features a decorative border of flowers. Large, vibrant red roses are positioned in the top right and bottom left corners. Interspersed among them are smaller, delicate pink blossoms and green leaves. The background is a soft, light pink with subtle, shimmering gold accents, creating a romantic and elegant aesthetic.

MOUs and Copyrights & Patents

Memorandum of Understanding (MoU)**SVGI MOUs**

- 1.VCRC, Puducherry**
- 2.AIMST UNIVERSITY MALAYSIA, 2024**

SVCOPT MOUs

SL.NO	INSTITUTE NAME	MOU DATE
1.	Wellness One Physiotherapy and Rehabilitation Centre, Kozhikode, Kerala.	15/02/2023
2.	AIMST University	29/07/2024
3.	Synergy Physio Care and Rehab Centre, Chennai.	20/08/2024
4.	Pain and Stroke Rehab Centre, Chennai.	11/09/2024
5.	Exercise Doctor, Chennai.	09/10/2024

SVCP MOUs

Shri Venkateshwara College of Pharmacy (SVCP) has entered into Memorandum of Understanding (MoUs) with several leading pharmaceutical companies to facilitate student training, continuing education, and other collaborative initiatives. The following MoUs have been signed:

1. Revive Formulations India Pvt. Ltd., Tamil Nadu - 1st March 2024.
2. Nanocent Therapeutics Pvt. Ltd., Puducherry - 1st April 2024.
3. Reltsen Health Care, Thirubuvanai, Puducherry - 2nd April 2024.
4. Bonn Schtering Bio Sciences, Puducherry - 21st March 2024.
5. The Madras Pharma Pharmaceuticals, Chennai, Tamil Nadu -12th June 2024.
6. Heartfulness Educational Trust, Puducherry - 12th June 2024.
7. Seven Hills College Of Pharmacy, Tirupati, Andhra Pradesh, India -30th March 2024.

Research Grants

Research Grants of SVDC 2023 -2025

S. No	Name of the Investigator	Title	College & Department	Grant Number & Funding agency
1)	Dr. Shabana Fathima , Dr. Bhuvanesh	AI based national project on cancer detection	SVDC – Oral Pathology	ICMR supported with AIIMS, New delhi, IIT, New Delhi, IIS Bangalore
2)	Dr. Shobana.G, Dr. Dorai Raghav	Community based early detection of oral precancerous lesion, accessibility and utilization of oral healthcare services among Irular Tribes Residing at Union Territory of Pondicherry	SVDC- Public Health Dentistry	ICMR STS

RESEARCH GRANTS --SVCET

SANCTIONED GRANTS:

Name of the research project	Amount Sanctioned (INR in lakhs)	Name of the Funding Agency	Type (Government/ non-Government)
Tribological Study through Electro Co-deposition of Pulse Current, Pulse Reverse Current and Functionally Graded Pulse Current Apparatus	95000	Endowment fund by Lumina Datamatics	Non-Government
Research on AI-Powered Institutional Superintendence System	170000	Endowment fund by Lumina Datamatics	Non-Government
Sustainable Street Light System for Smart City	62500	Endowment fund by Lumina Datamatics	Non-Government
Customizable Automated Drying System	69300	Endowment fund by Lumina Datamatics	Non-Government
Research on Mixed Reality in Education	95000	Endowment fund by Lumina Datamatics	Non-Government

Menstrual Waste Management in Pondicherry	90000	Endowment fund by Lumina Datamatics	Non-Government
Design of Automatic Urine Sample Collection System	42000	Endowment fund by Lumina Datamatics	Non-Government
Hybrid Energy Saving of Poer Distribution System for Residential Loads	62700	Endowment fund by Lumina Datamatics	Non-Government
Automated Intravenous infusion setup	42000	Endowment fund by Lumina Datamatics	Non-Government
Modifiable Prosthetic Leg Socket	40000	Endowment fund by Lumina Datamatics	Non-Government
Investigation on Mechanical and Thermal Properties of Polycarbonate and Polycarbonate Polymer Reinforced Glass Fiber Composites through FFF 3D Printing Technique	43000	Endowment fund by Lumina Datamatics	Non-Government
Design and Fabrication of Wiper Mechanism Agriculture Weeder	42000	Endowment fund by Lumina Datamatics	Non-Government
Design of Wireless Charging System for Electric vehicles	60300	Endowment fund by Lumina Datamatics	Non-Government
Design of Smart Bin for Face Mask Disposal	44800	Endowment fund by Lumina Datamatics	Non-Government
Automatic Class Attendance System based on face Recognition	40900	Endowment fund by Lumina Datamatics	Non-Government
IoT based Smart Energy Monitoring System	32500	Endowment fund by Lumina Datamatics	Non-Government
Design of Aquarium-supported Aquaponic Irrigation System	60300	Endowment fund by Lumina Datamatics	Non-Government

Design of Smart Bin for Face Mask Disposal	44800	Endowment fund by Lumina Datamatics	Non-Government
IoT based Smart Energy Monitoring System	32500	Endowment fund by Lumina Datamatics	Non-Government
Design of Aquarium-supported Aquaponic Irrigation System	51400	Endowment fund by Lumina Datamatics	Non-Government
Smart India Hackathon	672000	Ministry of Education's Innovation Cell, AICTE	Government
IPR and Innovation based Impact Lecture Series-Institutions Innovation Cell	12000	Ministry of Education's Innovation Cell, AICTE	Government
Hands-on Workshop for Teachers -To improve Science Teaching	158000	DST-NCSTC	Government
6 days ATAL Online FDP	100000	AICTE	Government
Total Grant Received	Rs. 21, 63, 000/-		

SANCTIONED RESEARCH GRANTS- ONGOING:

AICTE IDEA LAB for 1.1 crores by All India Technical Education, New Delhi.

Faculty Development Programme on “High Impact Research Article Writing and its Publication” by Dr.A. Prasanth (listed in world’s top 2% of scientists), Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai organized on 6th July 2024 for the Faculty members of SVGI.

Faculty Development Programme on “How to write effective research proposal for various funding agencies” by Dr. N. Vijayan, Senior principal scientist, Council of Scientific and

Industrial Research-National physical laboratory, New Delhi organized on 13th September 2024 for the Faculty members of SVGL.

Research & Innovation Contests

IDEATHON 2024

Dept.	Product-based ideas	Process-based ideas	App-based ideas
CSE	20	09	13
ECE & EEE	12	-	-
BME & MECH	25	02	-

SMART INDIA HACKATHON 2024 - 37 IDEAS WERE SUBMITTED, ONE IS SHORTLISTED FOR FINALE (11TH & 12TH DECEMBER 2024 AT JAMMU)

L&T-TechGium- ideas are to be submitted by the registered teams before 10th November 2024

Accenture Innovation Challenge 2024- 33 Ideas (18-CSE; 13-BME; 2-ECE) were submitted and no idea was shortlisted.

One Yes Technologies Hackathon – on 9th November 2024 at Dhanalakshmi college of engineering, Chennai- participation of 2 individual participants and 1 team from the Dept. of CSE (one team won the Runner up)



Ongoing Research

UG (STS) projects

S.No	Investigator Name	Guide Name	Title of the Study	Department
1	Arthi .S	Guide: Dr. Suresh .K	"Prevalence of Gastroesophageal reflux disease and its association with Psychophysiological factors among the medical students – A cross sectional study"	General Medicine
2	Balamaheswari .G	Guide: Dr. Suresh .K	"Sleep quality and its influencing factors among the nursing staff in a Tertiary care Hospital – A cross sectional study"	General Medicine
3	T. Mohamed Riyaj	Guide : Dr. Suresh .K	"Prevalence of Metabolic Dysfunction associated Steatotic Liver disease and associated risk factors among females at a Tertiary care centre"	General Medicine
4	Mithra Siva Shree	Guide : Dr. Suresh .K	"Hypertension and its correlation with anthropometric indices among medical college students"	General Medicine
5	Harrini .B	Guide : Dr. Suresh .K	" Association of Androgenetic alopecia and type 2 diabetes mellitus among Indian female population"	General Medicine
6	Mr. Naveencoumar	Guide: Dr.Mathan.K Co-Guide:Dr.Sharmi	Binge eating behaviour and its association with academic stress among collegestudents; A cross-sectional study	Psychiatry

PG Projects :

S.N o	Principal Investigator Name	Guide/ Co Guide	Title of the Project	Department
7	Dr. Chandhini .M	Guide: Dr. Loganathan	Knowledge, attitude and practice regarding diabetic retinopathy among nursing and pharmacy students in a tertiary care teaching hospital - A cross sectional study	Ophthalmology
8	Dr. Sneha N.G	Guide: Dr.R. Mithun Raj Co-Guide: Dr. PMN. Lakshmi	"Ultrasound Shear Wave Elastography in evaluation of supraspinatus tendinopathy with Magnetic Resonance Imaging (MRI) correlation"	Radio Diagnosis
9	Dr. Kayalvizhi .G	Guide: Dr. Bagavath Leena	A Clinical outcome of hemorrhoidal banding over the open hemorrhoidectomy in the management of second degree and selected cases of third degree internal Hemorrhoids.	General Surgery
10	Dr. Aishwarya	Guide: Dr. Vinayagam.G	Assessing growth rate and types of polyps among laparoscopic cholecystectomy patients in a tertiary care hospital	General Surgery
11	Dr. Mohamed Nassir Faraz.H	Guide: Dr. Rajkumar K.K	Comparative study of conventional dressing and topical Heparin dressing in lower limb Diabetic Ulcers	General Surgery
12	Dr. Padma Priya.C	Guide: Dr.T. Deepu co-guide: Dr.S.P. Venaktesh	Comparative study between continuous versus modified smead jones technique of suturing in closureof midline Laparotomy wound - A randomised controlled trial	General Surgery
13	Dr.A. Stephen	Guide: Dr.A. Radha Krishnan	A Comparative evaluation of intertruncal and corner-pocket approach of ultrasound guided supraclavicular block in terms of ulnar nerve blockage	Anaesthesiology

14	Dr. Aruru Uttej	Guide: Dr.K. Selvakumar	Comparing the effective ness of Hypochlours acid solution on healing of infected diabetic foot ulcer with hydrogen peroxide and povidine Iodine.	General Surgery
15	Dr.R. Uthayasankar	Guide: Dr.P. Nagalakshmi	Recovery profile of intraoperative Ketamine-Dexmedetomidine infusion versus Fentanyl-Dexmedetomidine infusion in patients undergoing General Anaesthesia- A Randomised control study	Anaesthesiology
16	Dr. Vijayadevi.V	Guide: Dr. Venkateshwaran	Prediction of Amputation in Diabetic foot Ulcer using svv wifi scoring system	General Surgery
17	Dr. S. Preethi	Guide: Dr.A. Radhakrishnan Co-guide: Dr. S. Suganya	The impact of Binaural beat music and noise cancelling Headphones on introperative Anxiety and pain Catastrophizing in Patients undergoing lower limb sugeries under spinal Anaesthesia - A Randomised controlled study	Anaesthesiology
18	Dr.P. Srirama krishnan	Guide: Dr.S. Chandraleela Co-guide: Dr.D. Booma	A Comparative study on two different doses of buprenorphine with levobupivacaine in Transversus abdomins plane block for pain relief following inguinal hernia repair-prospective double blind randomised control trial"	Anaesthesiology
19	Dr.S. Buvanesh	Guide: Dr.R. Jayashridevi Co-guide: Dr.S. Samsom David	Comparative study of the effect of lignocaine and Ketamine as Intra-operative and Post operative Analgesics in elective surgeries under General Anaestheisa	Anaesthesiology
20	Dr. Surendar N.M	Guide: Dr. Chinthavali Sujatha co-guide: Dr.J. Indhragandhi	Assessment of difficult intubation based on neck circumference and thyromental distance ratio in obese and non obese: A Prospective, Observational study	Anaesthesiology
21	Dr. Prithvi Raajanand .B	Guide: Dr. A. Arthi Co-guide: Dr.S. Suganya	Pre-operative Ultrasonographic evaluation of Inferior vena caval collapsibility to predict post-spinal Hypotension in patients undergoing lower abdominal surgeries - A prospective observational study	Anaesthesiology
22	Dr. Maheshwari .C	Guide: Dr. Muthukumar Co-guide: Dr.N. Nivedha	Comparative study of hernioplasty under local anaesthesia versus spinal Anaesthesia in tertiary care hospital- Puducherry	General Surgery
23	Dr.R. Jasper Cliveston	Guide: Dr.R. Muthukumar Co-guide: Dr.N. Nivedha	A Comparative study of spinal Anaesthesia versus local anaestheisa for lateral internal sphincoterotomy for chronic fissure in ano at tertiary care Hopital-Puducherry.	General Surgery
24	Dr.A. Devaraajulu	Guide: Dr.R. Krishna prabu	Comparison of Ultrasound guided erector spinae block versus paravertebral block for post operative analgesia in breast surgeries	Anaesthesiology
25	Dr. Yoganathan .R	Guide: Dr.R. Krishna prabu	Evaluation of effect of Pre-operative Anxiety in pre-Anaesthetic clinic on post operative outcome	Anaesthesiology
26	Dr. Anbalagan Sanchana	Guide: Dr.M. Loganathan	Causes of Subnormal Vision in patients with mature Cataract following small Incision Cataract Surgery at a Tertiary Care Hospital	Ophthalmology
27	Dr. Mathivanan .J	Guide: Dr.S.P. Venkatesh	A Prospective study to Evaluate the effectiveness of modified early warning (MEWS) score in predicting the Hospital Outcomes among emergency medicine ward in patients at a tertiary care hospital - Puducherry	Emergency Medicine
28	Dr. Sadeesh .K E	Guide: Dr.S.P. Venkatesh	A Prospective study of Measurement of optic nerve sheath diameter in traumatic brain injury with ultrasound in comparison with computerized tomography and evaluation	Emergency Medicine

			of its effectiveness in emergency department Triage	
29	Dr. Reshma M.I	Guide: Dr.M. Loganathan	study of Macular thickness between patients with type 2 Diabetes Mellitus without Diabetic Retinopathy versus Non-Diabetic Individuals	Ophthalmology
30	Dr. S.K. Saseetha	Guide: Dr. Nagalakshmi	An observational study using perfusion index as predictor of Hypotension following Thiopentone Induction in General Anaesthesia	Anaesthesiology
31	Dr.P. Vignesh	Guide: Dr.V. Prabu Co-guide: Dr.R. Surya	Comparison of hearing threshold using Pure Tone Audiometry and Android based application in Puducherry population	ENT
32	Dr.A. Anbulavanya	Guide: Dr. Prabu .V Co-guide: Dr. Rajarajan	Clinico-radiological correlation of sinonasal pathology in patients with chronic rhinosinusitis undergoing functional endoscopic sinus surgery in a Tertiary Care Centre	ENT
33	Dr.M. Ahila	Guide: Dr. Aroun Kumar .N	Wanger's Classification as a tool in evaluation and Management of Diabetic foot ulcers - An Observational study	General Surgery
34	Dr. Athul Ravindran	Guide: Dr. Mathan.K Co-guide: Dr. Kaviya.B	A Comparative study of executive functions in male alcohol Dependent patients and Non-alcohols in a Tertiary care Hospital in Rural Puducherry	Psychiatry
35	Dr. Akhil S.A	Guide: Dr. Sri Sai Priya	Factors contributing to relapse among patients with Alcohol dependence - A cross sectional study	Psychiatry
36	Dr. S. Praveen Porchelvan	Guide: Dr.M. Lavanya	A Study of Comparison between manual liquid based cytology and conventional smear cytology in fine needle aspiration of Thyroid lesions	Pathology
37	Dr.R. Sandesh	Guide: Dr.K. Selvakumar	A Comparative study of Leucopatch vs conventional dressing in Diabetic Foot Ulcers	General Surgery
38	Dr. G. Kavya	Guide: Dr.A. Arthi Co-guide: Dr. H. Riaz Fathima	Haemodynamic effects two different doses of phenylephrine preventing oxytocin induced Hypotension in elective caesarean section - A Randomised control trial	Anaesthesiology
39	Dr. Krishnakumar .R	Guide: Dr. Rajkumar K.K	A Comparative study between wanger's classification and Diabetic ulcer scoring system (DUSS) in a Tertiary Care Hospital	General Surgery
40	Dr. P. Jayachitra	Guide: Dr.M. Loganathan	Prospective study of Association between Dyslipidemia and Severity of Diabetic Retinopathy Among type 2 Diabetes Mellitus Patients	Ophthalmology
41	Dr.V. Iswarya	Guide: Dr.T. Ramanathan Co-Guide: Dr.R. Surya	Efficacy of Oral Ciprofloxacin combined with topical Ciprofloxacin Ear Drops versus Topical Ciprofoxacin Ear drops alone in the Empirical Management of Mucosal Type of Chronic Otitis Media: A Double blinded Randomised Control Trial	ENT
42	Dr. Sri Mangaladevi .K	Guide: Dr.V. Prabu Co-guide : Dr. Joemol John	Evaluation of Pulmonary function test using Spirometry in Non-asthmatic patients with Allergic Rhinitis and the effect of Allergic Rhinitis control in spirometric parameters.	ENT
43	Dr. Kanesha Lakshmi	Guide: Dr.K. Selvakumar	Comparing the Effectiveness of Bisap scoring system with other scoring systems in predicting the outcome in acute pancreatitis	General Surgery

44	Dr. Leela Manjulin .A	Guide: Dr. Mathan.K Co-guide: Dr. Kaviya.B	A Cross sectional study on the prevalence of obsessive compulsive symptoms in Schizophrenia and its correlation with severity of Schizophrenia in a Tertiary Hospital in Puducherry	Psychiatry
45	Dr. Deepiga P.K	Guide: Dr. Varghese Zachariah Co-Guide: Dr.K. Kalaiyaran	Correlation of Dietary pattern with functional status among stable COPD patients attending Respiratory Medicine Department of Tertiary care Hospital in Puducherry: A cross sectional study	Respiratory Medicine
46	Dr.S. Krishna Prasad	Guide: Dr.V. Prabu Co-guide: Dr.S. Rajeswari	Etiopathological study on otitis media among Children with Upper Respiratory Tract Infections in a tertiary hospital of Puducherry	ENT
47	Dr.D. Subashini	Guide: Dr. Bagavath Leena	A Clinicial outcome of Laparoscopic Varicocelectomy in the Management of Male infertility	General Surgery
48	Dr.G. Vanjinathan	Guide: Dr. Vijayeswaran Natarajan	Pattern of injuries in road traffic accidents in rural settings - A prospective study	General Surgery
49	Dr. Raakesh Madhivanan	Guide: Dr. Loganathan .M	Awareness and Knowledge regarding glaucoma among diabetic patients in a tertiary care teaching hospital - A cross sectional study	Ophthalmology
50	Dr.R. Ajisha Rachel	Guide: Dr.R. Krishnaprabu	Efficacy of Baska Mask versus Proseal Larlyngeal mask airway in elective surgeries under general Anaesthesia - A comparative study	Anaesthesiology
51	Dr. Priyanka .R	Guide: Dr. Varghese Zachariah	To Assess the impact of Diabetes mellitus on diffusion capacity of the lung for Carbon Monoxide	Respiratory Medicine
52	Dr. Singh Rashmi .C	Guide: Dr. Venkateshwaran c	A cross sectional study on Correlation between hyponatremia and complicated appendicitis	General Surgery
53	Dr. S. Kuralarasi	Guide: Dr.R. Muthukumar Co-guide: Dr.N. Nivedha	The prospective study on the role of preoperative upper Gastrointestinal endoscopy in Dyseptic patients undergoing elective Cholecystectomy for Gall Bladder disease in our society	General Surgery
54	Dr. D. Adesh	Guide: Dr.M. Arun Co-Guide: Dr.R. Mohamed iliya	Prevalence of Cardiac Autonomic Neuropathy in patients with type II Diabetes Mellitus.	General Medicine
55	Dr.R. Abinesh	Guide: Dr.J. Barathalakshmi Co-guide: Dr.S. Ram Pragadcesh	Assessment of morbidity profile and its risk factors among workers in Manufacture of Chemicals & Chemical products at Puducherry - A community based cross sectional study.	Community Medicine
56	Dr. Sunil Mitran R.I	Guide: Dr.T. Govindaraj Co-guide: Dr.K. Subashree	Expression of Cyclin D1 in Endometrial Hyperplasias and Carcinomas and its Correlation with Clinicpathological Parameters	Pathology
57	Dr. P. Abenaya	Guide: Dr.P. Nagalakshmi Co-guide: Dr.S. Samson David	A Comparative study between nebulized magnesium sulphate and dexmedetomidine for attenuation of hemodynamic response to laryngoscopy and endotracheal intubation: a double blinded randomized control study	Anaesthesiology
58	Dr. Manmohan kumar Dumpa	Guide: Dr.G. Prabu	Study of Mean Platelet Volume and its correlation with Glycosylated Haemoglobin (HbA1c) in type 2 diabetes	General Medicine
60	Dr. Vennapu Reddy Rohith	Guide: Dr.G. Prabu	Study of Uric acid levels in Hypothyroid patients	General Medicine

61	Dr. Thahim Rahim	Guide: Dr. Gulam Mohideen Co-guide: Dr.B. Vaishnav Kumar	A Comparative study on the functional outcome of Platelet rich plasma and steroids in the treatment of lateral Epicondylitis	Orthopedics*
62	Dr. Ankitha	Guide: Dr.M. Kulandaivel	Assessing the prognostic outcome of new borns admitted in NICU with stops scoring at Sri venkateshwaraa Medical College Hospital and Research Centre Puducherry	pediatrics*
63	Dr. Lakshmi Priya .K	Guide: Dr. Gopinath Co-guide: Dr. Kaviarasan	Association of common comorbidities with asthma in children: A cross sectional study	pediatrics*
64	Dr. Sachin Saju Joseph	Guide: Dr.S. Kasipandian	Visceral Adiposity Index (VAI) in Type 2 Diabetes Mellitus patients and its association with glycemic control: A Cross-sectional study	General Medicine
65	Thrilok Ram .B	Guide: Dr. Harsh Co-Guide: Dr. Bhaskaran	Correlation of Red blood cell distribution width with the Severity of Coronary Artery Disease among patient attending Tertiary Care centre in Puducherry a Prospective Study	General Medicine
66	Dr. Karthik S S	Guide: Dr. Ratna Vasanthan	Evaluation of acute ureteric obstruction using renal doppler indices and conventional ultrasound.	Radio Diagnosis
67	Dr. Avinash	Guide: Dr. Rajesh .R Co-guide: Dr. Noorul Ameen	A comparative study to assess the functional outcomes of clavicle fracture treated by conservative and surgical management	Orthopedics*
68	Dr. Kanakala S Narayana Swamy	Guide: Dr.K. Karthick Anand	Functional outcome of proximal tibial fractures fixed with intramedullary nailing through supra-patellar approach in a tertiary care hospital in South India - A prospective study	Orthopedics*
69	Dr. Ganesh .S	Guide: Dr. Karthick Anand	Injection Teriparatide versus calcitonin nasal spray in treatment of osteoporotic vertebral compression fractures	Orthopedics*
70	Dr. Medha Pandey	Guide: Dr. Mamikandan	A prospective study of functional outcome of Arthroscopic anterior cruciate ligament reconstruction with ipsilateral peroneus longus tendon autograft in a Tertiary care centre.	Orthopedics*
71	Dr. Aisha Abcer Abdul Gaffar	Guide: Dr. Arnel Arputh Sivarajan	Visceral Adiposity Index (VAI) in Type 2 Diabetes Mellitus patients and its association with glycemic control: A Cross-sectional study	Radio Diagnosis
72	Dr. Nivetha .E	Guide: Dr. Ratna Vasanthan	The Role of Magnetic Resonance Angiography in the evaluation of Circle of Willis Variants and its clinical Correlation at a Tertiary Care Centre in Puducherry	Radio Diagnosis
73	Dr. Vignasreya .C.A	Guide: Dr. Arnel Arputh Sivarajan	Comparative study of Ophthalmic and central retinal artery Doppler indices in patients with and without Diabetic retinopathy	Radio Diagnosis
74	Dr. Venkat .R	Guide: Dr. Barathalakshmi J Co-guide: Dr.K.Kalaiyaran	Incidence of Tuberculosis among household contacts receiving Tuberculosis Preventive Therapy in selected areas of Puducherry	Community Medicine
75	Dr. Gomathi .M	Guide: Dr.M. Kulandaivel	A Study on Correlation of levels of serum ferritin in children with simple febrile Seizure	Pediatrics
76	Dr.T. Sai Sreeya Reddy	Guide: Dr. Samuel Appadurai Alexander	An assessment of knowledge practice and screening for identification of patients at high risk for diabetic foot ulcers in diabetic patients attending a tertiary care center.	General Medicine

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77	Dr. D. Kavithayini	Guide: Dr. Subash Kautam Co-guide: Dr. Rincy	kidney disease patients in a tertiary care teaching hospital at Puducherry- A cross sectional study	Ophthalmology
78	Dr. Ramasubramaniyan .S	Guide: Dr. Vithiavathi .S	Triglyceride Glucose Index as a Marker of Glycemic control in patients with type 2 diabetes Mellitus - a cross sectional study	General Medicine
79	Dr. Arivumathi .R	Guide: Dr. Nitin Jain	Correlation of fibrosis 4 score with coronary heart disease in patients with metabolic associated fatty liver disease	General Medicine
80	Dr. Harish .G	Guide: Dr. Gopinath Co-guide: Dr. Latha	A cross sectional study on prevalence of obesity among school going children of rural and urban areas	pediatrics
81	Dr.A. Shirley Felishya	Guide: Dr. Subash Kautam	A study of relationship between axial length central corneal thickness and myopia among adolescent population in South India .	Ophthalmology
82	Dr.S. Sridhar	Guide: Dr. Ponnambalam	Orthostatic Blood pressure changes and its correlation with HbA1c levels and duration of Diabetes among type 2 Diabetes mellitus patients attending a Tertiary care hospital in Puducherry - A cross sectional study	General Medicine
83	Dr.B. Vishnu Priya	Guide: Dr.S. Kasipandian	An analysis of renal function test after contrast enhanced Radiological procedures	General Medicine
84	Dr.I. Santhosh	Guide: Dr. Shaik Anwar Hussain Co-guide: Dr.R. Venkatesh	A Study on the relationship between RCB indices and glycemic control and its association with microvascular complications in type II Diabetes mellitus.	General Medicine
85	Dr.R. Jayanandhini	Guide: Dr.K. Suresh	A Comparative analysis of the Clinical and metabolic profiles of Lean and Obese patients with type 2 Diabetes Mellitus	General Medicine
86	Dr.S. Subhathra	Guide: Dr. Vithiavathi .S	Correlation of QTc prolongation with HbA1c levels in patients with Type 2 Diabetes Mellitus	General Medicine
87	Dr. Natuva Ramesh Sai	Guide: Dr. Baskaran Srinivasan	Correlation of risk factors with the development of premature coronary artery disease in patients attending a tertiary care center.	General Medicine
88	Dr. Pornaki Snehitha	Guide: Dr. Mohammed Ansari Gaffoor	Significance of Magnetic Resonance Spectroscopy in the Assessment of ring enhancing lesions in brain	Radio Diagnosis
89	Dr. Vignesh .K	Guide: Dr. Balasubramaniam	A Comparative Study between conventional Proximal Femoral Nailing and Proximal Femoral Nail Antirodation 2 in the treatment of unstable intertrochanteric femoral fractures	Orthopedics'
90	Dr. Nila Raju	Guide: Dr.K. Suresh Co-guide: Dr. Mohammed Iliyas	Correlation of neck circumference and other Anthropometric measurements as a marker of Glycemic control in type 2 Diabetes Mellitus.	General Medicine
91	Dr. Ketha Raghuchandra	Guide: Ponnambalam	The Correlation between portal vein diameter splenic size and platelet count with esophageal varices in liver cirrhosis patients in tertiary care centre pondicherry.	General Medicine
92	Dr. Jayasudha .P	Guide: Dr. Shaik Anwar Hussain	Red cell distribution width in chronic liver disease among patient attending Tertiary Care centre in Puducherry an observational study	General Medicine

93	Dr. P. Bhasker	Guide: Dr Rajendran	To study prevalence of catheter related infections in hemodialysis patients among patient attending Tertiary care center in Puducherry	General Medicine
94	Dr. David Joy Kallely	Guide: Dr.N. Sivaraj	A Prospective study to compare the efficacy of three Dehydration scales (WHO, CDS and GORELICK) in Paediatric age group of under 14 years presenting with acute Gastroenteritis to emergency medicine - Puducherry.	Emergency Medicine
95	Dr. Vignesh Prabhu .B	Guide: Dr. Y.G Sathishkumar	Eschar and igm elisa in the diagnosis of scrub typhus and its correlation hospital based prospective study.	pediatrics
96	Dr. Rupan Chakravarthy .D	Guide: Dr. Y.G Sathishkumar Co-guide: Dr. Abinaya	Serum Lipid profile changes in children with dengue fever and its correlation with severity of disease in tertiary care hospital an observational study.	pediatrics
97	Dr. Monishaa .E	Guide: Dr. Parivathini Co-guide: Dr. Latha	Demographic clinical and etiological profile of seizure in paediatric age group 6 months to 13 years in Srivenkateshwaraa medical college hospital and research centre Puducherry	pediatrics
98	Dr. Vimalleshwar .R.R	Guide: Dr. D. Gayathri	Study of correlation of maternal Hemoglobin with cord blood Hemoglobin and Anthropometric measurement of Neonates	pediatrics
99	Dr. Nandhini	Guide: Dr. Parivathini Co-guide: Dr. Kaviarasan .L	Efficacy of lung ultrasound and its advantage over chest x-ray in clinically suspected cases of pneumonia in children from 2 months to 14 years of age	pediatrics
100	Dr. Agilan .A	Guide: Dr. R. Balasubramaniam	Comparative study of posterior approach and anterolateral approach for humerus shaft fracture fixed by plating	Orthopedics'
101	Dr. Ramya .M	Guide: Dr. P. Ravisankar	A study on postoperative risk assessment among abdominal surgeries using Clavien Dindo Classification in a tertiary care hospital	General Surgery
102	Dr. Kanivathani .P	Guide: Dr. Mathan.K Co-guide: Dr. Kalaiyaranan .K	A cross sectional study on impact of personality traits on Medication Adherence and quality of life among patients using inhalers for Obstructive airway disorders in a Tertiary care centre in Puducherry	Pulmonary Medicine
103	Dr. Priyanka	Guide: Dr. M. Priyatharshini Co-guide: Dr. S. Rajarajan	A Correlation study between serum cystatin c and carotid wall elastic resistance in type 2 diabetes mellitus patients without Nephropathy	Biochemistry
104	Dr. Kamalnath .K	Guide: Dr. Arnel Arputha Sivarajan Co-guide: Dr. Midhusha Reddy Vendoti	Computed Tomography evaluation of anatomic variations of sphenoid sinus and its related neurovascular structures - A Cross sectional study.	Radio Diagnosis
105	Dr. Haripriya .A	Guide: Dr. Brinda G David Co-guide: Dr. Yogindher Singh	A Clinico Dermoscopic study of Cutaneous Warts and its utility in monitoring the treatment outcome with Radio-frequency Ablation and Intralesional Bleomycin in a Tertiary care centre at Puducherry	DVL
106	Dr. Soorya Narayanan .S	Guide: Dr. Brinda G David Co-guide: Dr. Yogindher Singh	A Clinical study of palmoplantar dermatoses among patients attending dermatology OPD in a Tertiary Care Centre in Puducherry	DVL
107	Dr. Senthil kumaran	Guide: Dr. Manobalan .K Co-guide: Dr. Yogindher Singh Dr. V. Latha	Clinico-epidemiological profile of the dermatoses in the early and late neonatal period of the newborns delivered at a tertiary care hospital in south India	DVL

108	Dr. Sowmia	Guide: Dr. Manobalan .K Co-guide: Dr. Yogindher Singh Dr. R. Vinod	A cross sectional analytical study on staphylococcus aureus colonization in patients with chronic hand eczema at a tertiary care centre in Puducherry	DVI.
109	Dr. Kilari Raja Pavan krishna	Guide: Dr. Nirmal Kumar	Role of Quantitative CT in COPD and its correlation with spirometry	Radio Diagnosis
110	Dr. Prawin S A	Guide: Dr. Rajesh .R Co-guide: Dr. Noorul Ameen	Functional outcome of Elbow after comminuted radial head fractures treated with radial head excision.	Orthopedics ¹
111	Dr. Santhanakrishnan .A	Guide: Dr. Nirmal Kumar Co -guide: Dr. Rajarajan	Evaluation of individuals with Lumbosacral transitional Vertebra for various patterns of Degenerative changes using MRI	Radio Diagnosis
112	Dr. Archana .A	Guide: Dr. Srinivasan Ammulu	Study of Body Mass Index fasting blood sugar, serum triglycerides in the first Trimester as a early marker in prediction of Gestational Diabetes Mellitus	OG
113	Dr. Badmavathi .K	Guide: Dr. NR. Indu Co-guide: Dr. Abinaya	To Evaluate the outcome of elective induction of Labour at 39 weeks with expectant Management in women delivering in a Tertiary Institute	OG
114	Dr. Ajiti Tiwari	Guide: Dr. Nirmala Jaget Co-guide: Dr. P. Suresh	A Study on the effect of exogenous thyroxine on known hypothyroid and the newly diagnosed hypothyroid patients during first trimester of pregnancy	OG
115	Dr. Sandhiya .K	Guide: Dr. P.B. Hiremath Co-guide: Dr. Balaji .S	A Study on the effect of exogenous thyroxine on known hypothyroid and the newly diagnosed hypothyroid patients during first trimester of pregnancy	OG
116	Dr. Aksshaya M.R	Guide: Dr. G. Sindhuja Sekar Co-guide: Dr. M.V.N Malleswari	A Study on Fetomaternal outcome in term pregnancies with isolated Oligohydramnios : A cross sectional study	OG
117	Dr. Nazreen	Guide: Dr. Hiremath P.B Co-guide: Dr. NR. Indu	Increased Risk of Cesarean Delivery with Advancing Maternal Age; Indications and its Associated Factors in Women Delivering in SVMCH & RC	OG
118	Dr. I. Saranya	Guide : Dr. Sindhujha Sekar Co-guide: Dr. E. Vijaya Bharathi	Effect of Pre pregnancy BMI & Gestational weight gain on Fetomaternal outcome	OG
119	Dr. Kondapalli Sai Santoshi Prathyusha	Guide: Dr. Nirmala Jaget Co-guide: Dr. Shameera Banu .A	Efficacy and Feto Maternal outcome of Induction of labor with Mifepristone and Intracervical Dinoprostone Gel Vs Intracervical Dinoprostone Gel alone in Term Pregnancy	OG
120	Dr. Snehapriya .T	Guide: Dr. Nirmal Jaget Co-guide: Dr. Prem kumar	Evaluating maternal risk factors in term gestation leading to Neonatal Intensive care unit admission	OG
121	Dr. Kokila .S	Guide: Dr. P.B. Hiremath Co-guide: Dr. NR. Indu	Correlation between first trimester crown - Rump length with birth weight	OG
122	Dr. Sandhiya .R	Guide : Dr. Srinivasan Ammulu Co-guide: Dr. Sneha J.S	Study on Knowledge attitude and practice on cervical cancer screening, Human Papilloma virus and Human Papilloma virus vaccine among women visiting outpatient department in SVMCH&RC	OG
123	Dr. Pushpakala .A	Guide: Dr. M. Sakthi Balan Co-guide: Dr. Thelengana Arikrishanan	Effects of antiepileptic therapy on various hematological and biochemical parameters among the epileptic patients - A case control study	Pharmacology
124	Dr. Ganesh Kumar .K	Guide: Dr. J. Barathalakshmi	Prevalence of substance abuse among the Arts and Science college students in the district of Puducherry	Community Medicine

125	Dr. Karthikeyan .G	Guide: Dr. Thelengana .A Co-guide: Dr. Venkatesh .A Dr. Razook Faredh .J	A study on electrophysiological parameters related to F wave and H reflex in patients with restless leg syndrome	General Medicine
126	Dr. Sai Ravali .T	Guide : Dr. T. Deepu Co-guide: Rajesh Amal praveen .J	A prospective study of gall bladder wale thickness in predicting difficult laparoscopic cholecystectomy & its conversion to open cholecystectomy	General Surgery
127	Dr. Dinesh .M	Guide: Dr. R. Vinod Co-guide: Dr. K. Suresh Co-guide: Dr. Kalaiyaran Co-guide: Dr. Sushmita Sana Chowdhury	Spectrum of pathogens causing Acute Respiratory tract infection with special reference to Anti-bacterial resistance pattern in a tertiary care hospital	Microbiology
128	Dr. Narmadha .S	Guide : Dr. T. Deepu Co-guide: Rajesh Amal praveen .J	A comparative study of efficacy and effectiveness in upper gastrointestinal endoscopy among sedated and non sedated patients	General Surgery
129	Dr. Rinilda Rajee Mathew	Guide: Dr. Kalaivani .S	A retrospective study of p16 immunohistochemistry expression and clinico-pathological correlation in squamous cell carcinoma of oral cavity	Pathology
130	Dr. Praveen Kumar .S	Guide: Dr. Jonathan Arnold co-Guide: Dr. Balaji .S	Platelet Indices evaluation in patients with Dengue Fever in a Tertiary Care Centre in Puducherry	Pathology
131	Dr. Buvaneshwari .R	Guide: Dr. Barathalakshmi .J Co-Guide: Dr. Bhuvaneshwari .N	"Knowledge, Attitude and Practice (KAP) on Human Papilloma Virus (HPV) and HPV Vaccines among MBBS students of a Medical college, Puducherry - a cross sectional study"	Community Medicine
132	Dr. Sangeetha .S	Guide: Dr. Loganathan .M Co-Guide: Dr. Riya Rani Kesh	Prevalence of colour vision deficiency among individuals seeking pre-employment screening in a Tertiary healthcare facility in South India- A retrospective study	Ophthalmology
133	Dr. Abinaya .L	Guide: Dr. Prabu .V Co-Guide: Dr. Umarani .A	"Knowledge, Attitude and Practice regarding Otitis media among parents with children <12 years in a Tertiary Care Hospital - A Cross sectional study"	ENT
134	Dr. Rahamath Nawaz Shaik	Guide: Dr. Loganathan .M	"Knowledge Attitude, and Practice towards Retinopathy of Prematurity among Paediatrics and Obstetrics gynaecology Postgraduates in Puducherry :A Comprehensive study"	Ophthalmology
135	Dr. Senthilvel .V	Co-investigator : Dr. Rincy .D	"Prevalence and risk factors, severity of diabetic retinopathy among diabetes in Ophthalmology Out Patient Department in a Tertiary Care teaching hospital in Pondicherry : A Hospital Based Cross-sectional study"	Community Medicine
136	Dr. Acsah Supriya .J	Guide: Dr. Loganathan .M	"A Study of Knowledge, Attitude and Practice about eye donation among continuous rotatory medical internship and Postgraduate students in a Teaching hospital, Puducherry "	Ophthalmology
137	Dr. Venkat .R	Guide: Dr. Brathalakshmi .J Co-guide: Dr. Madhumadhi .S	"Visible fat intake pattern and its association with obesity among adult population in rural Puducherry - A cross sectional study"	Community Medicine
138	Dr. Ganesh Kumar.K	Guide: Dr. Brathalakshmi .J Co-guide: Dr. Madhumadhi .S	"Comparison of smartphone application based visual acuity - WHOeyes with Snellen chart for use in the field practice area of a Tertiary Care Centre"	Community Medicine
139	Dr. Hemabalan .K	Guide: Dr.Prabu.V Co- Guide:Senbagadvei.S	Assessment of hearing in medical students with personal audio devices exposure in a teaching institution in Puducherry.	ENT

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140	Dr. Gautham Thangamuthu .J.S	Guide: Dr.Prabu.V Co- Guide:Senbagadvei.S	Assessment of Dizziness Handicap Inventory (DHI) and Quality of Life (QOL) and their correlation among dizziness patients attending a tertiary hospital in Puducherry	ENT
141	Dr. Ganesh Kumar .K	Guide:Dr.Surendar Rangasamy Co-Guide: Dr.Sneha	Out of Pocket expenditure on Healthcare among selected Urban Households of Puducherry	Community Medicine
142	Dr. Aarthy .E	Guide:Dr. Bharathalakshmi Co-Guide: Dr.Tamizhmathi	Assessment of total dissolved solids (TDS) and Biological aspect of water with participants perceptions regarding water quality and its Health implications among students in selected areas of Puducherry	Community Medicine

Faculty projects

S.No	Name	Title of the Project	Department
143	Dr. Jayamala A.K	"Evaluating the Influence of Flipped Classroom and Peer-Assisted Learning on Clinical Skills Acquisition in first MBBS undergraduate students"	Physiology
144	Dr. Senthilvel .V	"Prevalence and risk factors, severity of diabetic retinopathy among diabetes in Ophthalmology Out Patient Department in a Tertiary Care teaching hospital in Pondicherry : A Hospital Based Cross-sectional study"	Community Medicine
145	Dr. Sneha J S	Emotional Intelligence and Perceived Stress among Medical Undergraduates and Postgraduates: A cross sectional study	Community Medicine
146	Dr. Bhuvanewari .N	"Risk Assessment for non-communicable diseases among adult population attending selected primary health centres of Puducherry - A cross sectional study"	Community Medicine
147	Dr. Suganya .S	Assessment of sonographic skills of novices for identification of anatomical structures in ultrasound guided axillary branchial plexus block.	Anesthesiology
148	Dr. Booma .D	Effect of preoperative sleep disturbance on onset and duration of sensory and motor blockage in supraclavicular block	Anesthesiology
149	Dr. Indhragandhi .J	Comparison of perioperative atelectasis grading in elective laparoscopic surgeries for obese and overweight patients using a modified lung ultrasound score	Anesthesiology
150	Dr. Prabu .V	Effectiveness of Trichloroacetic acid cauterization versus paperplasty for small to moderate central perforation in Tympanic membrane : A Comparative study	ENT
151	Dr. Sunil Kumar Saxena	A Cross-sectional study to analyse the sensorineural Hearing loss in Chronic Otitis Media patients in a Tertiary care hospital at Puducherry.	ENT
152	Dr. Ramanathan. T	Prevalence of Sensorineural hearing loss in people with type 2 Diabetes mellitus patients: A Tertiary care hospital based cross sectional study	ENT
153	Dr. Joemol John	Clinico radiological Correlation of Chronic Otitis Media with Ipsilateral Sinonasal Pathologies	ENT
154	Dr. Rajeswari .S	Comparative study of Auditory Brainstem Response in people with tinnitus with and without pure tone audiometric Sensorineural hearing loss	ENT
156	Dr. Umarani .A	Knowledge, Attitude and Practice about Noise Induced Hearing Loss among Industrial Workers - A Cross sectional study	ENT

157	Dr. Ranjani Subha .R	Clinical Correlation of RSI (reflux symptom index) and RFS (reflux finding score) in diagnosis and management in patients with laryngopharyngeal reflux	ENT
158	Dr. Senbagadevi	Clinico-radiological Assessment of chronicity of symptoms and grading of adenoid Hypertrophy in children with Adenoid Facies	ENT
157	Dr. Latha .R	The Effect of sorghum and Soybean diet as supplementation on glycosylated hemoglobin and lipid profile in diabetic patients - A Pilot Study	Physiology
158	Dr. Jeevitha .p	Expression of macrophages, their cytokines and correlation with immunohistochemistry in the endometrium of infertile women with endometriosis when compared to infertile women without endometriosis	Physiology
159	Dr. Surendar Rangasamy	Perception of Stakeholders on the implementation of Integrated Teaching Module in a Medical College at Puducherry	Community Medicine
160	Dr. Jeyanthi .S	Evaluation of Physical activity, Health and Skill related physical fitness in school going Adolescents in Puducherry, India: A Cross sectional study	Physiotherapy
161	Dr. Manobalan	Efficacy of intralesional steroids versus topical tofacitinib in patchy alopecia areata among patients attending dermatology clinic in a teaching tertiary care hospital: a randomized control trial	DVL
162	Dr. Yogindher Singh	Efficacy of autologous platelet rich plasma (PRP) versus growth factor concentrate (GFC) in moderate androgenetic alopecia: a randomized open - Label trial	DVL

ONCOING FACULTY/STUDENT PROJECT DETAILS

S.No	Name of the project guide	Project title	List of project students
1	DR.K.K.SIVAKUMAR	Drug Discovery Approaches for Targeting EGFR: Curcumin-2-Amino Thiazole Derivatives as Novel Anticancer Candidates	1. GOWTHAMAN. V 2. HARISH M.K. 3. SANJAY.V. 4. SIVAKUMAR.L. 5. SIVASAKTHI.P
2	Mrs. KAYALVIZHIE.SU	In silico Docking studies of camptothecin in various anti-hypertensive pathway	1. SENTHILNATHAN.D.N 2. PRIYANKA.K 3. VIMAL.I
3	Dr.M.JEEVITHA	Formulation and evaluation of sustained release tablet for a selected drug by using natural polymer	1. K.SOZHAMADEVI 2. R.SEETHA 3. G.SAKTHI DHINESH
4	Mrs. M.PRIYANKA	Synthesis of zeolites from natural source	1. M. JAGAN 2. B. LOGESHWARAN 3. T. ABISHEK 4. R. PRAVEEN 5. G.NITHISH KUMAR
5	Dr.A.UMESH	Formulation and evaluation of <i>Gardenia jasminoides</i> herbal oil extract lotion for skin care	1. ILAKIYA.E 2. MOHANAPRIYA.R 3. PRAVEENA.S 4. KALAI SELAVAM .P
6	Dr. GANNA ANITHA	Synthesis and characterisation of mannich bases	1. DEEPIGA.M 2. NITHIYAPATHI.V 3. SATISH SRINIVAS.R
7	Mrs. R. HARINI	Formulation and evaluation of herbal soap	1. DEEPIKA.R 2. DHARSHINI. A 3. JEEVA. U 4. THARIQ AJEEZ. M
8	Dr. ARUL DOSS T	Pharmacoepidemiology of Hypertension Treatment in Renal Impairment: Analyzing Medication Adherence, Prescribing Patterns, and Clinical Outcomes.	1. AFNAN.S 2. GAYATHRIJ 3. MONICA.K 4. MAHESH BALAJI
9	Mrs. M.SARANYA	Formulation and evaluation of facial serum with guava leaf extract	1. AVILASHA 2. DEEPA 3. SANGAVI 4. SHERLIN MAGGIE 5. VIJAYALATCHUMI

10	Dr. M.JEEVITHA	Formulation and Evaluation of Orodispersible tablet for a selected drug by using natural super disintegrant	1. P.NIVETHA 2. K.ABINAYA 3. D.VISHNU PRIYA
11	Dr. G.SABAREES	Molecular docking and molecular dynamics simulations discover curcumin analogues as potential anti-tubercular agents	1. DEVANANDHAN 2. KAVYA.K 3. PRETHINGA DEVI 4. PREMRAJ.N
12	Mrs. E.NIRMALA	Formulation of anti-aging cream using Pomegranate extract	1. RAJARAJESHWARLE 2. JAYASHREE .S 3. SIVADHARSHINI.M
13	Ms. K.INTHUMATHY	Phytochemical analysis and formulation of cough soft jelly by using <i>Ocimum gratissimum</i> .	1. BABITHA. P 2. KRISHNAKUMAR. V 3. MOHAMAD ELIAS. M 4. PREMKUMAR. G
14	Ms. S.KANMANI	Preparation and evaluation Polyherbal formulation (soap)	1. S.BADRINATH 2. S.MOIHAMED MUSTHAFA 3. B.M.KEERTHANA
16	Mr. A.YOGESHWARAN	Investigation of Neuroprotective of <i>Nelmbu nucifera</i> in Huntington's Disease Through Network Pharmacology Approach	1. LOKESHWARI 2. DHARSHINI G 3. RUKMANGATHAN P
17	Ms. S.KOWSALYA	"Brand Bias:Uncovering the Truth about Ciprofloxacin Tablet Quality through Comparative Research"	1. VISHWA VARSHINI 2. PRIYADHARSHINI.S 3. SHAGITHA.S 4. KEERTHIKA.M
18	Ms. D.PRIYADHARSHINI	Formulation and evaluation of oral dissolving film of passiflora incarinata for hormonal imbalance management	1. HEMALATHA.D 2. RAMANAN.M 3. SHAGUL HAMED 4. DARSHINI.R
19	Mrs. E. NIRMALA	Gel formulation (under process)	1. SHARAN, V 2. VIJAYABASKARAN, 3. THANUSHREE
20	Mrs. S.PRIYADHARSHINI	Synthesis, characterisation, and Insilico study of bis hydrazone and its metal complex	1. VIJAYKUMAR 2. RAJESH 3. AKASH 4. MOCHAGAN

S. No	INVESTIGATORS	TITLE	DEPARTMENT
1	Dr.Prof.Rajeswari. R, Mrs. Sathiya	Evaluating the efficacy of vein visualization device for vascular access during peripheral IV cannulation among patients.	Medical Surgical Nursing
2	Dr. Prof. Rathidevi. S , Mrs. Kalpana, Mrs. Indumathy.	A study to assess the prevalence and the risk factors of sarcopenia among elderly people at selected area, Puducherry.	Community Health Nursing.
3	Mrs. Batnavadi. R Mrs. Thamizharasi	A Study to assess the challenges and effectiveness of nursing care module on infection control among nurses working at critical care unit at SVMCH&RC	Medical Surgical Nursing
4	Dr. Prof. K. Jayanthi, Mrs. Sujitha	A study to assess the effectiveness of video assisted teaching on knowledge regarding mental health wellbeing among transgender residing at Puducherry.	Mental Health Nursing
5.	Dr. Prof. G. Jamunarani Mrs. G. Amudha	A study to assess the effectiveness of Nursing Educational Programme on knowledge and attitude regarding "LAQSHYA" among Staff Nurses at SVMCH & RC, Ariyur, Puducherry".	Obstetrics and Gynaecology Nursing
6.	Dr. Prof. E.Chandraleka, Mrs. Priya	A study to assess the effectiveness of Feeding Techniques for Preterm Neonates in Neonatal Intensive Care Unit among Staff Nurses at SVMCH& RC, Puducherry.	Child Health Nursing
7.	Dr. Prof. Rathidevi. S, Mr. Thirivikkaraman, Ms. Dhanalakshmi, Mrs. Winny Anna Ninman.	A study to assess the Prevalence and factors influencing of Substance abuse Among Adolescents at selected area Puducherry.	Community Health Nursing

2. ONGOING RESEARCH PROJECTS (STUDENTS) (2024 – 2025)

S. No	INVESTIGATORS	TITLE	DEPARTMENT
1.	Mrs. Gowri. H Guide: Dr. Prof. Malliga. M	A study to evaluate the effectiveness of nurse led digital detoxification program on internet obsession and psychosocial health among adolescents at selected school of Puducherry.	Child Health Nursing
2.	Ms. Abirami. I Guide: Dr. Prof. Rajeswari. R	A study to explore the lifestyle risk factors associated with cardiovascular diseases and effectiveness of educational intervention on knowledge regarding cardiovascular disorder among young adults.	Medical Surgical Nursing

3.	Ms. Jessy Jovita. M Guide: Dr. Prof. Rajeswari, R	A study to assess the effectiveness of nursing care bundle on neurological function and quality of life among patients with neurological disorders.	Medical Surgical Nursing
4.	Ms. Manishiya. M Guide: Dr. Prof. K. Chandralekha	A study to assess the effectiveness of nursing care bundle on quality of life among bronchial asthma patients at selected hospital. Puducherry.	Medical Surgical Nursing
5.	Mr. Nirmalraj. R Guide: Dr. Prof. K. Chandralekha	A study to assess the effectiveness of body weight resistance training on cognitive function and physical fitness among older adults at selected villages of Puducherry.	Medical Surgical Nursing
6.	Mrs. Kamalasanthi. U Guide: Dr. Prof. G. Jamunarani	A study to evaluate the effectiveness of interventional protocol module on reduction of PCOS symptoms among adolescence diagnosed with PCOD at Puducherry.	Obstetrics and Gynaecological Nursing
7.	Mrs. Kavitha. T Guide: Mrs. S. Kavitha	A study to assess the effectiveness of midwife led therapeutic programme on management of menopausal problems among menopausal women at selected villages of Puducherry.	Obstetrics and Gynaecological Nursing
8.	Ms. Priyadharshini. K Guide: Mrs. G. Amudha	A mixed method study to explore the lived experience of usage of feminine products and to assess the effectiveness of educational interventional programme on managing menstrual health and hygiene among adolescence girls at selected villages of Puducherry.	Obstetrics and Gynaecological Nursing
9.	Mrs. Arthi. J Guide: Dr. Prof. S. Rathi Devi	A study to assess the effectiveness of health promotion intervention on musculoskeletal disorders and quality of life among house wives at selected villages of Puducherry.	Community Health Nursing
10.	Mr. Sundaralingam. S Guide: Dr. Prof. K. Jayanthi	A study to assess the effectiveness of neurobic exercise programme on depression among elderly at selected old age homes, Puducherry.	Mental Health Nursing

Principal Investigator	Title	Department & IEC No.
Dr. Prof. Jeyanthi. S Principal, SVCOPT	Evaluation of Physical activity, health and skill related physical fitness of school going adolescents in Puducherry, India: A cross-sectional study	SVCOPT Ref.No: 183/SVMCH/IEC-Cert/Dec/24 Dated 16/12/24

ONGOING PG STUDENTS THESIS : 2024-2025

SL.NO	STUDENT NAME	GUIDE NAME	TITLE
1	LAKSHNA G.B	MR. S. RAMKUMAR	ANALYSIS OF FORWARD HEAD POSTURE, STATIC BALANCE AND DYNAMIC BALANCE AMONG SCHOOL TEACHERS WITH NORMAL AND LOUD VOCAL INTENSITY – AN ANALYTICAL DESCRIPTIVE STUDY
2	SUHARA.S	PROF. DR. JEYANTHI. S	COMPARISON OF MUSCULOSKELETAL PAIN ,CORE ENDURANCE AND POSTURE IN ADOLESCENTS CARRYING HEAVY SCHOOL BAGS VS NOT CARRYING HEAVY SCHOOL BAGS
3	N.SANTHIYA	MS. A. KIRTHIGA	THE EFFECTIVENESS OF NIEL-ASHAR TECHNIQUE ALONG WITH KINETIC CHAIN ACTIVATION EXERCISE ON PATIENT WITH

			ADHESIVE CASPULITIS: A EXPERIMENTAL STUDY
4	R. MOHANAPRIYA,	MS. A. KIRTHIGA	EFFECT OF MCGILL STRENGTHENING EXERCISE ALONG WITH POST FACILITATION STRETCHING FOR CHRONIC NON SPECIFIC LOW BACK PAIN AMONG SOFTWARE PROFESSIONALS.
5	V. LAKSHMIPRIYA	PROF. DR. JEYANTHI. S	EVALUATION OF BALANCE, PROPRIOCEPTION AND SLEEP QUALITY AMONG SMARTPHONE ADDICTED EARPODS USERS AND NON USERS.
6	KANAGARAJ. J	MRS. J. PHILOMINA	EFFECTIVENESS OF PROWLING WITH PROPRIOCEPTIVE TRAINING ON STRENGTH AND FUNCTIONAL INDEPENDENCE AMONG CHRONIC STROKE SURVIVORS.
7	SANTHIYA. P	MRS. J. DHARANI	TITLE - EFFECT OF BOWEN TECHNIQUE AND POSTURAL CORRECTIVE EXERCISES ON UPPER CROSS SYNDROME WITH CERVICOGENIC HEADACHE AMONG DENTIST (EXPERIMENTAL STUDY)
8	GOKUL. R	MR. T. BHARANEEDHARAN	PREVALANCE OF VISUOSPATIAL ORIENTATION DEFICITS IN INDIVIDUALS WITH TYPE 2 DIABETIC MELLITUS IN PUDUCHERRY
9	R. KEERTHANA	MRS. M. MALARVIZHI	EFFECT OF HYPOPRESSIVE EXERCISE VERSUS MODIFIED LUMBOPELVIC EXERCISE FOR STRESS URINARY INCONTINENCE AMONG OBESE WOMEN
10	M. MUTHUKUMARAN	MRS. J. DHARANI	TO EVALUATE THE FUNCTIONAL DISABILITY AND SPINAL MOBILITY AMONG OCCUPATIONAL DRIVERS – AN ANALYTIC DESCRIPTIVE STUDY
11	C. RUBANRAJ	MISS. S. SAVITHA	PREVALANCE ON HAND EYE COORDINATION AND HAND GRIP STRENGTH AMONG TYPE - 2DIABETIS MELLITUS

12	A. JEEVANAND HAM	MRS. M. MALARVIZHI	THE COMPARATIVE ANALYSIS OF JUMPER'S KNEE PAIN ALONG WITH SPORTS COMPETITION ANXIETY AMONG ELITE ANDAMATEUR VOLLEY BALL PLAYERS – COMPARATIVE ANALYSIS
13	S. RAJESH KUMAR	MR. S. RAMKUMAR	EFFECT OF ANKLE PROPRIOCEPTIVE NEUROMUSCULAR FACILITATION VERSUS ANKLE MOBILIZATION ON ROM, AND DYNAMIC BALANCE AMONG SALES PERSON WITH PLANTAR FASCIITIS: A COMPARATIVE STUDY
14	M. NARMADA	MRS. G. SUBALAKSHMI	EFFECTIVENESS OF SOMATOSENSORY RETRAINING ON BALANCE AND QUALITY OF LIFE AMONG GERIATRIC POPULATION –A RANDOMIZED CONTROL TRIAL .
15	G. KAMALDHAS AN	MRS. S. SAVITHA	EFFECTS OF COGNITIVE BEHAVIOUR THERAPY ALONG WITH AEROBIC EXERCISE TO FACILITATE THE GUT BRAIN AXIS AMONG PARKINSONISM
16	REVATHI PANDURANG AN	PROF. PAULRAJ MANICKAVELU	EFFECTIVENESS OF ADVANCED PHYSIOTHERAPY INTERVENTIONS IN REHABILITATING PATIENTS WITH NEUROMYELITIS OPTICA - A SYSTEMATIC REVIEW.
17	J. SUBAPRADH A	PROF. PAULRAJ MANICKAVELU	TOPIC – ENCHANCING MOBILITY: A PILOT STUDY ON FALL PREVENTION THROUGH COMBINED EXERCISE STRATEGIES IN PARKINSONS DISEASE
18	A. AJITHKUMA R	MRS. G. SUBALAKSHMI	EFFECTIVENESS OF VIRTUAL AND AUGMENTED REALITY IN POST-STROKE SURVIVORS FOR AMBULOPHOBIA AND BASOPHO BIA.
19	S. SWETHA	MR. T. BHARANEEDHAR AN	TO FIND THE SIGNIFICANT EFFECT OF BIMANUAL THERAPY AMONG THE PATIENTS WITH HEMINEGLECTANT SYNDROME – THE CASE SERIES

S.NO	Investigators	TITLE	DEPARTMENT
1	Dr.ZIPPORAL THOMAS	Comparison Of Antimicrobial Efficacy Of Papaya Leaf Extract And Guava Leaf Extract Against Fusobacterium Nucleatum - An Invitro Study	svdc-conservative dentistry and endodontics
2	DR.HARISH	Comparison Of Postoperative Pain And Quality Of Life After Single Visit Root Canal Treatment Using Three Different Sealers- A Randomised Controlled Trial	Svdc-Conservative Dentistry And Endodontics
3	DR.NIHAL AHMED	Comparison Of Effect Of Self Nano Emulsifying Curcumin Gel And Non Eugenol Periodontal Dressing In Tissue Response,Early Wound Healing , Pain Assessment Following Periodontal Flap Surgery In Chronic Periodontitis Patients - A Randomized Control Trail	Svdc-Periodontology
4	DR.ROSHAN ARBAAZ	An Online Survey About Knowledge And Awareness Regarding Periodontal Health Among Under Graduate Medical Students In Puducherry.A Cross Sectional Questionnaire Study	Svdc-Periodontology
5	DR HARISH R,	Trifurcated C Shaped Root Canal –A Case Report	Svdc- Endodontics
6	DR SRIRAMANAN,	Effectiveness Of Sodium Bicarbonate In Management Of Dry Socket - A Randomized Controlled Trial	Svdc- Oral And Maxillofacial Surgery
7	DR VIGNESHWARAN,	Knowledge And Awareness On Principles Of Antibiotics And Antimicrobial Resistance Among Dental Students And Dental Practitioners In Pondicherry ; A Questionnaire - Based Study	Svdc- Oral And Maxillofacial Surgery
8	DR ASHMEEN SHABANA,	Awareness Of 3rd Molar Impaction And Its Relationship With Temporomandibular Disorders Among Students With Particular Age Group	Svdc- Oral And Maxillofacial Surgery
9	DR SAI SHRUTHI, DR SURESH KUMAR	Awareness In Handling Multidose Vial Among Dental Practitioners -A Questionnaire Based Study	Svdc- Oral And Maxillofacial Surgery
10	DR LOGESH, DR PIRADHIBA	The Practice Of Clear Aligner Disposal And Recycling - The Role Of Orthodontists And Patients - A Questionnaire Study	Svdc- Orthodontics
11	DR JEENATH BEGUM	How Social Media Shapes Patient Preferences For Clear Aligners In Orthodontic Treatment- A Questionnaire Study	Svdc-Orthodontics
12	DR ZIPPORAL T	Comparative Evaluation Of Antimicrobial Efficacy Of Honey, Double Antibiotic Paste, Propolis Mixture And Calcium Hydroxide As Intracanal Medicament Against	Svdc-Conservative Dentistry And Endodontics

		Controlled Study	
6.	DR. SAI SRUTHI	Effectiveness Of Melatonin Prophylaxis On The Post - Operative Pain And Sensory Recovery Following Maxillofacial Trauma Surgery	Oral Surgery
7.	DR. NIHAL AHAMED	Evaluation Of Wound Healing With And Without Active Oxygen Releasing Gel Following Laser Depigmentation - A Randomized Controlled Trial	Periodontics
8	DR. ROSHAN ARBAAZ	Comparative Evaluation Of Wound Healing Following Topical Application Of Hyaluronic Acid Gel After Scalpel , Laser And Electrocautery Frenectomy Techniques - A Randomised Controlled Trial	Periodontics
9	DR.YAMUNA	Comparative Evaluation Of Antimicrobial Efficacy Of Calcium Hydroxide Infused With Nanoparticles Of Acacia Nilotica And Chitosan As Intracanal Medicament-An In Vitro Study	Conservative Dentistry And Endodontics
10	DR. MITHILA	Comparison Of Shear Bond Strength And Microleakage Between Bioactive Restorative Material And Self Adhesive Bulk Fill Composite-In Vitro Study	Conservative Dentistry And Endodontics
11	DR.DEVAPANDI	A Comparative Evaluation Of Antimicrobial Property Of Four Disinfectants On Irreversible Hydrocolloid Impressions: An In Vivo Study	Prosthodontics
12	DR.NITISH KUMAR	Comparison Of Fracture Resistance And Bond Strength Of Anterior Provisional Crown Materials Using Conventional, 3d Printed And Milled Technique - An In Vito Study.	Prosthodontics
13	DR SRIRAMANAN.S	To Evaluate The Analgesic And Anti Inflammatory Efficacy Of Laksha Guggulu With Amoxicillin After Surgical Extraction Of Mandibular 3 rd Molar Impaction - A Randomized Control Trial	Oral Surgery
14	DR VIGNESHWARAN R	Comparative Evaluation Of Acute Stress And Clinical Efficacy Between Piezosurgery And Conventional Rotatory Technique Intransalveolar Extraction Of Impacted Mandibular Third Molars : A Randomized Controlled Trial	Oral Surgery

15	DR.HARINIG	Effect Of Adjunctive Laser Therapy On Gcf Monocyte Chemoattractant Protein-1 Levels In Non-Surgical Management Of Periodontitis -A Split Mouth Randomized Controlled Trial	Periodontics
16	DR.MONISHA.S	Comparing The Effectiveness Of Tetracycline Hydrochloride Fiber With Oxygen Releasing Gel As An Adjunct To Scaling And Root Planing In Periodontitis Patients.- A Randomized Controlled Trial	Periodontics
17	DR.MARY VERGHESE	A Comprehensive Look At The One-Year Clinical Performance Of Kids Activa™ Bioactive-Restorative Composite In Primary Molars	Pedodontics
18	DR.AARTHI	A Comparative Evaluation Of Anxiolytic Potential Of Oral Melatonin At Two Different Doses In Children: A Randomised Control Trial	Pedodontics
19	DR.ARCHUTHAMANA N	Does The Extrusion Of Zinc Oxide Eugenol Obtruating Material In Primary Molars Undergoing Resorption Get Hindered By A Resorbable Collagen Barrier	Pedodontics
20	DR. JEENATH BEGAM. K	Evaluation Of Surface Topography And Elemental Composition Of Titanium Mini-Implants In 2 Different Mouthwash And Artificial Saliva - An In-Vitro Study	Orthodontics
21	DR. BALAJI R	Evaluating The Effect Of Canine Retraction With Pg Spring And Sliding Mechanics Using Cone Beam Computed Tomography - A Split Mouth Study	Orthodontics
22	DR. LOGESH S	Assessment Of Rate Of Demineralization In Banded Permanent First Molars Using Different Molar Banding Protocols: Split Mouth Randomized Control Trial.	Orthodontics
23	DR KAVYA PC,	Comparative Evaluation Of Pulp Tissue Dissolution Efficacy Of Sapindusmukorossi And Allium Sativum Using Two Irrigation Activation Techniques- An In Vitro Study	Conservative Dentistry And Endodontics
24	DR MONISHA A,	Evaluation Of Antibiofilm Activity And Cytocompatibility Of Various Intracanal Medicaments On Dual Species Biofilm - An Invitro Study	Conservative Dentistry And Endodontics

25	DR NITISH KUMAR,	Comparative Evaluation Of Biological, Mechanical And Patient Reported Outcome For Compoeners And Porcelain Veneers – An In Vivo Study	Prosthodontics
26	DR SUGANYA S,	Evaluation Of Biaxial Flexural Strength, Surface Roughness And Surface Hardness Of Conventional Lithium Disilicate Ceramic And Green Nanoparticle Reinforced Lithium Disilicate Ceramic (Graphene, Titanium Dioxide, Gold) Using Chewing Simulator And Thermocycling - An In-Vitro Study	Prosthodontics
27	DR SUVEDHA R,	Comparative Evaluation And Effectiveness Of Two Different Hydrophilic Pit And Fissure Sealants In Children:A Split Mouth Design	Pedodontics
28	DR S ADITYARAYANAN ,	A Clinical Evaluation Of Kedo Nano Plus And M Pro Pedo Files In Primary Molar Pulpectomy Assessing Instrumentation Time, Obturation Quality, Intensity Of Pain And Postoperative Pain :A Randomized Controlled Trial”	Pedodontics
29	DR RUBINI M,	Comparative Evaluation Of Novel Chemo-Mechanical, Atraumatic Restorative Technique And Conventional Caries Removal Techniques In Primary Teeth – A Randomised Clinical Trial	Pedodontics
30	DR AJAY,	An Assessment Of Osteogenic Potential Of Cissus Quadrangularis In Mandibular Fracture – A Randomized Control Trial	Oral Surgery
31	DR UMESH CHANDHGUNPUDI,	An Assessment Of Perioperative Outcomes Of Distoangular Impaction Surgery Using Straight And Contra Angled Surgical Handpieces – A Randomized Controlled Trial	Oral Surgery
32	DR DURKA,	A Comparative Assessment Of Efficacy Of Self-Assembling Peptide P11-4 And Calcium Phosphate-Based Remineralization Agents On Artificially Induced White Spot Lesions- An Invitro Study	Orthodontics
33	DR KIRUTHIGA,	Evaluating Linear And Angular Changes Of Orthodontic Tooth Movement In Friction And Frictionless Mechanics Using Intraoral Scanner - An Invivo Study	Orthodontics

34	DR JOSE PAUL,	Comparitive Study Of Three Composite Materials In Bonding Attachments For Clear Aligners - Assessment Of Bond Strength, Operation Time And Wear Resistance- An Invitro Study	Orthodontics
35	DR KARTHIGA ,	Radiographic Evaluation Of Bone Level,Density And Osseointegration Around Implant With And Without Injectable Platelet Rich Fibrin:Randomized Controlled Trial.	Periodontics
36	DR KAVIYA G,FIRST YEAR,PG DR PARTIBAN S	Comparison Of Conventional And Microsurgical Access Mucogingival Procedure In Management Of Grade 2 Furcation Defects With Activated Platelet Rich Fibrin(A-Prf)-A Randomized Controlled Trial.	Periodontics
37	DR AKANSHA KISHEN,	Comparative Evaluation Of Wear Resistance And Biaxial Flexural Strength Of Peek And G-Cam With Conventional Zirconia For Posterior Restoration Using Chewing Stimulator - An In Vitro Study	Prosthodontics

☒ Faculty projects

S.NO	INVESTIGATOR	TITLE	DEPARTMENT
1	DR.HIDHAYA S KHATEEJULLA	Awarenws Of Pre Surgical Infant Orthopedics Among Docto=Rs In Cleft Care Team- Questionnaire Survey	Svdc-Orthodontics
2	DR.SRILEKHA J READER	Evaluation Of Learning Approaches Among Dental Students Using Assist - A Crossectional Study	Svdc-Conservative Dentistry And Endodontics
3	DR.GAYATHRI MADHAN READER	Perceptions And Attitudes Of Dental Students About Language Barrier- A Multi Centeric Cross Sectional Study	Periodontics

4	DR.BINDU MEERA JOHN	Evaluate The Clinical Performance Cention Forte Using The Ushps Criteria - Randomised Controlled Trial	Svdc-Conservative Dentistry And Endodontics
5	DR.KULDEEP SINGH	Perception Among Dental Faculties Towards Naac From Accredited Dental Colleges In India- A Cross Sectional Study.	Svdc-Public Health Dentistry
6	DR.ABINAYA ,	Awareness Of Mothers About The Influence Of Maternal Oral Health On Primary Dentition In Pondicherrypopulation-A Questionnaire Survey.	Svdc-Pedodontics
7	DR.POORANI	A Novel Autologous Biological Dentin Post - A Case Report	Svdc-Conservative Dentistry And Endodontics
8	DR.KAVITHA A	C-Swot Analysis Of Undergraduate Dental Curriculum - An Indian Scenario.	Svdc-Oral And Maxillo Faial Surgery
9	DR.KEERTHANA RAO	Comparison Of Criss Cross Wiring Technique Versus Conventional Arch Bar For Maxillomandibular Fixation During Treatment Of Mandibular Fractures : A Randomised Controlled Trial.	Svdc- Oral And Maxillo Faial Surgery
10	DR.HARISUDHAN	A Comparative Analysis Of The Impact Of Botox Injection Versus Prolotherapy On Masticatory Performance And Occlusal Forces Using Emg Analysis In Bruxism Patients : A Randomized Control Trial	Svdc- Ortho Dontics Oral And Maxillo Faial Surgery
11	DR.KEERTHANA RAO	Influence Of Muscle And Bone Impingement On Trismus Following Zygomatic Complex Fractures : A Radiographic Study	Svdc-Oral And Maxillo Faial Surgery
12	DR D.POORANI,	Comparative Evaluation Of Efficacy Of Herbal Root Canal Irrigants With Sodium Hypochlorite – An Invitro Study	Svdc-Endodontics
13	DR NARENDIRAN N,	Evaluating The Neglect Of Perio-Related Clinical Diagnosis And Treatment Plan In	Svdc-Periodontics

	Puducherry Dental Practitioners – A Questionnaire Study	
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☒ UG (STS) projects

S.NO	INVESTIGATOR	TITLE	DEPARTMENT
1	MISS.U.SHIVASRI	Assessment Of Periodontal Health Status And Oral Hygiene Practices Among The Seafarer's Community In Pondicherry	Svdc-Periodontics
2	MISS. M.THOGAINAYAGI	Assessing The Prevalence Of Periodontal Disease, Oral Precancerous Lesions And Deleterious Oral Habits Among Industrial Workers In Puducherry - A Cross Sectional Study	Svdc-Periodontics
3	MR.ARISH ,	Knowledge Attitude And Practice Of Dental Students Towards Artificial Intelligence (Ai) In Pediatric Dentistry: A Questionnaire Based Survey	Svdc-Pediatric And Preventive Dentistry
4	AMAYA P. P	Impact Of Parenting Style On Child's Behaviour, Caries Experience And Oral Health Status - A Cross Sectional Study	Svdc-Pediatric And Preventive Dentistry
5	MISS.SWARNAMUGI	Knowledge And Perception Towards Oral Histology And Dental Anatomy As A Subject Among Undergraduate Students Of Puducherry	Svdc-Oral Pathology
6	MR. A. AMIRTHAZHAGAN	Comparative Analysis Of Stained Ground Sections With Four Different Stains Over Unstained Ground Sections - An In-Vitro Study.	Svdc-Oral Pathology
7	MISS. V.M.PRIYA	Assessment Of Knowledge, Attitude And Practices Of Self Medication And Home Remedies Among Puducherry Parents For Their Children's Dental Problem- A Cross-Sectional Survey	Svdc-Pediatric And Preventive Dentistry

8	MISS. ARRULCHELVI	Correltion Between Vertical Dimension Of Occlusion And Different Facial Measurements Among A Sample Of Pondicherry Population – An Observational Study	Svdc-Prosthodontics And Crown & Bridge
10	MISS. MADHUMITHA PRABAGARANE	Perception Of General Public On Their Experience During Dentist Patient Interaction.	Svdc-Prosthodontics
11	MISS .MADOU	Evaluation Of Microbial Contamination On White Coat And Scrubs Among The Health Care Professionals In The Dental College -A Cross Sectional Study	Svdc-Conservative Dentistry & Endodontics



Central Research Lab

Facilities available at Central Research Laboratory at SVMCH& RC
Lab Director: Dr Sethupathy S (Prof & Head)
Lab In charge : Dr Madhan S (Senior Scientific Officer)



Laminar Air Flow

Laminar air flow cabinet is used to create a

- Sterile atmosphere for activities like processing Microbiological culture,
- Antimicrobial sensitivity test,
- Broth dilution , Agar dilution and Microbroth dilution ,
- water sample analysis to determine the coliform bacteria etc..

DNA extraction and Master mix preparation (for PCR purpose).

Thermal Cycler



- It is used to amplify small segments of DNA or RNA.
- It facilitates the rapid and precise replication of genetic materials for various molecular biology applications such as
- Gene Sequencing , Drug resistance genes , Species identity confirmation by using 16S rRNA sequencing etc..
- Real-time PCR systems provide both a qualitative and quantitative examination of the sample, whereas standard PCR systems provide only a qualitative analysis of the sample.

Electrophoresis Unit



- Gel electrophoresis instruments are used to separate nucleic acids and proteins based on their size and charge.
- Used in forensic, molecular biology, genetics, and microbiology labs, gel electrophoresis instruments are used to run and compare DNA and amplified gene product samples such as antibiotic drug resistance genes etc..



UV Transilluminator & Gel document System with PC

- UV-transilluminators are used in molecular biology labs to view DNA (or RNA) that has been separated by electrophoresis through an agarose gel.
- During or immediately after electrophoresis, the agarose gel is stained with a fluorescent dye which binds to nucleic acid



Research Day
2025
Glimpses







Ariyur, Puducherry, India

Wp32+6mg, Ariyur, Puducherry 605110, India

Lat 11.903951° Long 79.701774°

28/03/2025 11:19 AM GMT +05:30

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***Note of
Thanks***

Thanks Giving

The organizing Team wishes to express sincere thanks to: The chairman Sir, COO, Director, MS, DMS s and all the Patrons for their support and constant encouragement in planning and conducting the Research Day 2025 Special Thanks to all participants and Judges for the Research presentation and evaluation, for their time, sharing their knowledge and involvement.

Without their participation this programme is not possible Sincere thanks to the Chief guest, Guest of Honours for their consent contribution to the success of the event and also inspiring the young minds with their scientific knowledge. All the co-ordinators of all the committees and the Management for helping in all aspects making the necessary arrangements.

Last but not the least to the "Almighty" to have given us strength to carry out the deliberations If any lapses observed are due to time factor in bringing out this souvenir and to be forgiven.

Organising Team



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Ariyur, Puducherry-605102.



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M.Pharm (AWAITING APPROVAL)



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Cse (Iot & Cyber Security Including Block Chain Technology)*

*Awaiting for Pondicherry University Affiliation

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