Sri Lankan Medical and Dental Association in the UK

SLMDA

Spring Scientific Meeting Programme and Abstracts Sunday 3rd May 2026

Delta Hotels by Marriot
Worsley Park Country Club,
Manchester M28 2QT

MANCHESTER

2026

The SLMDA steps in to help Sri Lanka at her time of need

On your behalf, the SLMDA donated £35,000 raised through the generous contributions from the SL diaspora

We thank our delivery partners:
1. SLHC London 2. SLMA, 3. Red Cross Sri Lanka
4. Foundation of Goodness, 5. Seruwila Mangala Rajamaha Viharaya 6. District General Hospital, Chilaw

Save a Baby

Seruwila Mangala Rajamaha Viharaya, Seruwila
+94 71 748 5400
info@seruwilababy.lk

23/12/2025

The Executive Committee,
Sri Lanka Medical and Dental Association – UK (SLMDA-UK).

Subject: Heartfelt Appreciation for Your Generous Humanitarian Donation in Support of Flood-Affected Mothers and Newborns in Seruwila

Dear Esteemed Members of the Executive Committee,

On behalf of Save a Baby – Sri Lanka, and the beneficiaries we serve, we write with deep gratitude to sincerely thank the Sri Lanka Medical and Dental Association – UK (SLMDA-UK) for your generous and compassionate donation in response to our recent humanitarian appeal.

We are pleased to confirm the receipt of your kind contribution, amounting to Sri Lankan Rupees 1,667,120.28 (LKR 1,667,120.28), which has been safely received through our official bank account. We are truly humbled by your prompt acceptance of our request and your immediate action to support pregnant mothers and newborn babies affected by the recent floods in the Seruwila Divisional Secretariat Division.

Your generosity comes at a pivotal time. As outlined in our request, these families – across Sinhala, Tamil, and Muslim communities – have been severely impacted by unprecedented flooding, further intensified by the overflow associated with the Mavil Aru Dam. Your support will directly enable us to provide essential maternal and newborn care items, nutritional support, hygiene supplies, and other urgent relief goods to safeguard the health and dignity of mothers and infants during this vulnerable period.

We wish to assure you that all funds will be utilized with the utmost transparency, accountability, and responsibility. In close coordination with national medical officers and healthcare professionals, upon completion of the distributions and related activities, we will be pleased to submit to you a comprehensive post-implementation report, including:

- A summary of activities carried out
- Details of assistance provided
- Photographic documentation of distributions
- An impact matrix highlighting beneficiary outcomes

This will be shared with you as a formal follow-up, in keeping with our commitment to openness and good governance.

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மாவட்ட பொது வைத்திபசாலை - சிலாபம்
DISTRICT GENERAL HOSPITAL - CHILAW

Dr Manika Samanthilake
President
Sri Lanka Medical Association

Dear Sir,

Re: Request for Utilization of SLMA Relief Fund for Restoration of the Haemodialysis Unit – District General Hospital, Chilaw

Yours sincerely,

Director
District General Hospital
Chilaw

Annual Spring Meeting – Scientific sessions
Sri Lankan Medical and Dental Association in the UK
Sunday 3rd May 2026, Delta Hotels by Marriott
Worsley Park Country Club, Manchester M28 2QT

Welcome Message from the Scientific Organising Committee

Dear Patrons, Colleagues and Friends of the SLMDA,

Welcome to the 2026 Annual Spring Scientific Sessions of the Sri Lankan Medical and Dental Association. This year's theme is ***"From Data to Decisions: Transforming Care Through Technology"***. We have assembled a panel of distinguished speakers who will share their expertise through plenary lectures on this theme. Please join us in thanking them for graciously accepting our invitation.

Mr Supul Hennayake, Consultant Paediatric Urologist at the Royal Manchester Children's Hospital, Manchester, will deliver the prestigious SLMDA Oration 2026. The Title is "**Seeing beyond: Lessons learned for Mental Wellbeing from Genital Reconstructive Surgery."**

Providing young doctors and dentists in the early stages of their careers, as well as medical and dental students, with an opportunity to present their research as a poster or an oral presentation is a key aim of these scientific sessions. Both types are eligible for a prize in their category. We received many high-standard submissions, and congratulate the researchers on the excellence of their work. The number of submissions we received was unprecedented.

Please remember to view the posters, all of which are presented as E-Posters. We are sure you will enjoy and benefit from the experience. Please discuss them with the presenters. It will encourage them and provide them with valuable experience in facing the scrutiny of the scientific community. Please note that the proceedings abstract booklet was prepared well before the meeting, and some abstracts may have been updated since then.

We have done our best to organise a meeting of high scientific value, and we hope you will find the sessions both enjoyable and educationally stimulating.

Best wishes,
The Scientific Organising Committee

The Scientific Committee members

Academic Chair: Dr Hasini Banneheke
Editor: Dr Mahendra Gonsalkorale
RCP collaborator: Dr Shirmila Withana
Coordinator: Professor Mahesh Nirmalan

Advisors: Dr Melanie Weerasuriya (President - SLMDA), Professor Niroshini Nirmalan (Vice President – SLMDA)
Abstract selection committee: Dr Sita Nanayakkara, Dr Channa Hewamadduma and Dr Udara Kularatne
Panel of judges for poster presentations: Dr Ruwan De Soysa, Dr Roshan Amarasena, Dr Akalanka Weerasekara, Mr Selvan Jegatheeswaran
Panel of judges for oral presentations: Dr Veerasiri Punchihewa, Dr Roshan Perera and Dr Thushara Rodrigo
Scientific sessions chairpersons: 1) Mr Ajantha Jayatunga, 2) Dr Champa Sumanasuriya, 3) Dr Allistair Solomonsz, 4) Dr Sati Ariyanayagam, 5) Dr Veerasiri Punchihewa, 6) Dr Andrew Nayagam, 7) Dr Mahendra Gonsalkorale, 8) Dr Kumudu Dissanayake, 9) Dr Lankanatha Alwis, 10) Dr Janaka Weerathunga, 11) Prof Sathi Sukumar, 12) Dr Melanie Weerasuriya, 13) Dr Ruwan De Soysa, 14) Dr Shirmila Withana
Abstract production, proof-reading and editorial committee, Certificates & Proceedings book printing: Dr Mahendra Gonsalkorale, Dr Sita Nanayakkara, and Mrs Glossinda Solomonsz
E-Poster, e-certificates and other IT-related matters: Dr Dileepa Ediriweera and Dr Harsha Jayamanne

ABOUT THE SLMDA

The Sri Lanka Medical and Dental Association is a non-political, non-racial organisation that respects equality and diversity and has no religious affiliations. It was founded in 1982 and currently has a membership of Sri Lankan doctors & dentists exceeding 400.
The main aim of the SLMDA is to assist undergraduate medical & dental education in Sri Lanka. However, the constitution has recently been extended to support humanitarian causes of exceptional significance to Sri Lanka. (e.g. 2004 Tsunami).

Council

President:	Dr Melanie Weerasuriya
Vice President:	Prof Niro Nirmalan
Secretary:	Dr Shani Anthony
Treasurer:	Dr Kumuduni Dissanayake

Annual General Meeting & Spring Scientific Sessions
This is usually on the Saturday of the Bank holiday in early May, with a different theme and venue each year. The trainees/students' session allows high-quality research and scientific presentations, with a Founder's Prize awarded for the best oral and poster presentations. It includes an Annual SLMDA Oration delivered by a distinguished expert. The day is concluded with a dinner-dance and social evening.

SLMDA Scientific Sessions Programme

From Data to Decisions: Transforming Care Through Technology

Sunday 3rd May 2026. Delta Hotels by Marriott
Worsley Park Country Club, Manchester M28 2QT

Time		Agenda item
08:15	08:50	Registration and Sri Lankan Breakfast/Coffee
08:50	09:00	President's welcome - *Dr Melanie Weerasuriya*
Session 1: Chairpersons - Mr Ajantha Jayatunga & Dr Champa Sumanasuriya		
09:00	09:20	**Transforming Diabetes Care Through Technology** **Professor Lalantha Leelarathn**a *(MBBS, MD, PhD FRCP)* Clinical Associate Professor in Diabetes, Department of Metabolism, Digestion and Reproduction, Imperial College London & Consultant in Diabetes, St Mary's Hospital, Imperial College Healthcare NHS Trust, London
09:20	**09:25**	**Session 1: Q & A**
Free paper presentations – 1: **Chairpersons Dr Mahendra Gonsalkorale & Prof Sathi Sukumar**		
09:25	09:35	OP1:A15: Toxoplasmosis among patients undergoing haemodialysis and renal transplant recipients in Sri Lanka. **Presenter:** *WEERASOORIYA GPC (**Online presentation)***
09:35	09:45	OP 2: A25: immunisation coverage against national QMAS standards: Elizabeth Street Surgery, Blackpool, United Kingdom. **Presenter:** *Asela DISSANAYAKE*
09:45	09:55	OP3:A23: Efficacy and safety of xeligekimab and vunakizumab in the treatment of moderate-to-severe plaque psoriasis: a systematic review of randomised controlled trials. **Presenter:** *Dalmi LANKA PELI GEDERA*
Session 2 : Chairpersons - Dr Allistair Solomonsz & Dr Sati Ariyanayagam		
09:55	10:15	**Data and digital-driven learning health systems for high- and low-middle-income countries. Professor Krishnarajah Nirantharakumar** *(MBBS, MD, FRCP, FFPH),* Clinical Professor of Public Health & Health Data Science, King's College, London
10:15	10:20	Session 2: Q & A
10:20	11.00	Tea break. Poster viewing
Free paper presentations – 2: **Chairpersons- Dr Lankanatha Alwis & Dr Janaka Weerathunga**		
11:00	11:10	OP4:A32: in-silico modelling and insights into the pH-dependent destabilisation of cd36 in oral cancer. Presenter: *SUMETH M.W* **(O*nline presentation)***
11:10	11:20	OP5:A31: Vestibular infant screening in congenital permanent deafness. Presenter: *Sudhira A.B. RATNAYAKE*

11:20	11:30	OP6:A13: A feasible national medical appraisal model for Sri Lanka based on UK practice. Presenter**:** *Lasitha Isanka MALALASEKARA*
Session 3: Chairpersons: Dr Veerasiri Punchihewa & Dr Andrew Nayagam		
11:30	11:50	**The Impact of Oral Health on Long-Term Wellbeing. Dr Simon Crutchlow** (*BDS, MFDS, RCS, MClinDent (Pros) AKC)* Speciality Registrar in Periodontology, Guy's Dental Hospital, London & Apolline House Dental Practice
11:50	11:55	Session 3: Q & A
Session 4: Chairpersons: Dr Roshan Amarasena and Dr Roshan Perera		
11:55	12:15	**Wearables enabled personalised health care** **Dr Anthony Wilson** *(MRCP, FRCA)* Consultant in Anaesthesia and Critical Care at Manchester University NHS Foundation Trust
12:15	12:20	Session 4: Q & A
Session 5: Chairpersons: Dr Chaminda Sellahewa & Dr Shirmila Withana		
12:20	12:40	**Artificial intelligence in healthcare: Diagnostics and service delivery** **Dr Melissa Wickremasinghe** *(MBBS, PhD, FRCP)* Consultant respiratory physicians, St. Mary's Hospital, NHLI, Imperial College Health Care NHS trust, London
12:40	12:45	Session 5: Q & A
SLMDA Oration: Chairpersons – Dr Melanie Weerasuriya & Dr Ruwan De Soysa		
12:45	12:50	Introduction of the orator by the President
12:50	13:20	**Seeing beyond: Lessons learned for Mental Wellbeing from Genital Reconstructive Surgery** **Mr Supul Hennayake** *(MBBS, MS, FRCS, FRCSEd)* Consultant Paediatric Urologist, Royal Manchester Children's Hospital, Manchester
13:20	13:30	Awards and closing ceremony
13:30	14:30	Refreshments
14:30	15:30	Annual General Meeting (Members only)

TOPICS AND BIOGRAPHIES OF GUEST SPEAKERS

1: Transforming Diabetes Care Through Technology

Professor Lalantha Leelarathna, MBBS, MD, PhD, FRCP

Clinical Associate Professor in Diabetes, Department of Metabolism, Digestion and Reproduction, Imperial College London, & Consultant in Diabetes, St Mary's Hospital, Imperial College Healthcare NHS Trust, London

A brief summary CV:

Graduated with First Class Honours in MBBS from the University of Colombo, Sri Lanka. Completed specialist training in the UK. Obtained an MSc from King's College London. In 2014. Awarded a PhD from the University of Cambridge, UK, for his research on hypoglycaemia, automated insulin delivery systems and continuous glucose monitoring in type 1 diabetes, work that laid the foundation for his ongoing contributions to diabetes technology research. He has been a leading investigator in numerous diabetes technology studies evaluating the clinical and cost effectiveness of automated insulin delivery and continuous glucose monitoring systems in both type 1 and type 2 diabetes.

He has co-authored over 125 peer-reviewed publications, including landmark studies in The New England Journal of Medicine, The Lancet, The Lancet Diabetes & Endocrinology, and Diabetes Care. He was awarded the Winner of the NHS England Outstanding Contribution Award for Services in Diabetes-Quality in Care (QiC) award in 2019.

Dr Leelarathna's current work is focused on evaluating the role of continuous glucose monitoring and automated insulin delivery in adults with type 2 diabetes and those with advanced kidney disease, including those undergoing dialysis treatment.

A brief summary of his talk and key points:

This talk will explore recent advances in novel diabetes technology and their transformative impact on glycaemic management. Continuous glucose monitoring (CGM) systems have shifted care from intermittent finger-prick testing to real-time, data-driven decision making, improving both clinical outcomes and patient experience. The integration of CGM with insulin delivery has enabled the development of hybrid closed-loop (HCL) systems, often referred to as "artificial pancreas" technologies, which automate insulin dosing based on glucose trends. Evidence from clinical trials and real-world studies demonstrates that these systems significantly increase time in range while reducing hypoglycaemia and glycaemic variability across diverse populations, including those with type 1 diabetes and selected individuals with insulin-treated type 2 diabetes. Advances in algorithm design, sensor accuracy, and user interface have enhanced usability and reduced burden, supporting wider adoption.

2: Wearables enabled personalised health care

Dr Anthony Wilson, MBBS, MA (Cantab), MRCP, MSci, FRCA, FFICM, PGCert

Consultant in Anaesthesia and Critical Care at Manchester University NHS Foundation Trust

Brief Biography:

Dr Anthony Wilson is the chief medical information officer for research and innovation at Manchester University NHS Foundation Trust (MFT), where he has championed the development of the Trust's state-of-the-art electronic patient record and digital research environments since

2021. He is the deputy director of the Christabel Pankhurst Institute for digital health technology research and translation at the University of Manchester. His research interests include wearable health technology and he co-leads MFT's wearables research group. He has studied a range of wearable sensors in over 400 patients in inpatient and outpatient settings.

Clinical Research Activities:
2025 -Principal Investigator, UKHSA Sepsis Surveillance Study
2025 -Principal Investigator, Zanamivir IV effectiveness study, GSK
2021- Chief Investigator, EMBRaCE-GM, MFT, UK
2020 -Principal Investigator, COSMIC-19, MFT, UK.

Clinical Innovation Activities:
2025-Chair, Innovative Technology Adoption Programme, Operational Group, MFT. This group appraises and promotes the agile development of innovative technology to improve patient care at MFT. **2024**-Clinical Champion, MFT-Medtronic Strategic Research Partnership. I have led the clinical evaluation of a state-of-the-art wearable vital sign sensor in 100 inpatients over 3 months. **2024** -NHS AI champion (Manchester), Responsible AI UK. **2021** -Chair, Clinical Decision Support Working Group, MFT. This group develops and optimises digital alerts to promote clinical best practice and research recruitment at MFT.

Key points in the presentation:
"In this plenary, we will consider the 'big bet' which the UK has placed on wearables in the NHS 10-year plan. Is this bet a sure thing, or is it a 100:1 outside chance? Wearables are a disruptive technology, and we will explore the implications of their use in current clinical care pathways".

3: The Impact of Oral Health on Long-Term Wellbeing

Dr Simon Crutchlow, BDS, MFDS, RCSEd, MClinDent (Pros.) AKC
Speciality Registrar in Periodontology. Associate Dentist, Apolline Dental; Chingford, London
Brief CV:
Graduated from the University of Bristol in 2012. Completed a four-year Master of Clinical Dentistry in Fixed and Removable Prosthodontics and obtained his MFDS RCSEd. Currently in the final year of speciality training in periodontics at Guy's Dental Hospital, which runs alongside a Master of Clinical Dentistry in Periodontology at King's College London. Throughout this period of study, Simon has continued to work part-time in primary care.

He is currently undertaking a postgraduate MClinDent in Periodontology, due for completion in September 2026. Also a part-time associate in general practice, where his practice is mainly in periodontology, receiving referrals for periodontal disease and conditions. His career goal is to provide the best possible care for patients, which can only be achieved through continued learning and practice. He makes an effort to continue learning since graduation and enjoys seeing how it benefits his patients.

Experience:
Associate Dentist, Apolline Dental; Chingford, London, 2015 to Present
Associate Dentist, Dentistry 100; City of London, London, 2024 to Present
Associate Dentist, Parsons Green Dental Practice; London, 2024 to Present

Memberships:
Member of the British Society of Periodontology and Implantology
Member of the European Federation of Periodontology

Member of the Royal College of Surgeons Edinburgh (Faculty of Dental Surgery)

Presentation Summary:

Oral diseases are highly prevalent, largely preventable, and impose a considerable burden on both individuals and society. The links between oral health and mental, social and physical health will be discussed. Examples of how data and technology can improve care will be outlined, including the King's College London Biobank as a data-driven research resource; personalised medicine that combines biomarkers with conventional risk factors to guide preventive resource allocation; and digital intra-oral scanners for patient communication and monitoring.

4: Artificial intelligence in healthcare: Diagnostics and service delivery

Dr Melissa Wickremasinghe, MBBS, PhD, FRCP

Consultant respiratory physician and Digital Clinical Lead, Imperial College Health Care NHS trust, St Mary's Hospital, London. Honorary Senior Lecturer, Imperial College

Background:

Dr Melissa Wickremasinghe is a Consultant Respiratory Physician at Imperial College Healthcare NHS Trust, based at St Mary's Hospital, London, with specialist clinical expertise in Interstitial Lung Disease (ILD), Sarcoidosis, and Granulomatous Disease.

Brief CV and interests:

She was trained in Medicine at London Charing Cross Hospital, completed her PhD at Imperial College in 2001, and undertook her postgraduate education in respiratory medicine at the Royal Brompton Hospital, St Mary's Hospital, and Hammersmith Hospital, focusing on Teams in the management of complex lung disease. She is also an expert in interventional bronchoscopy, Endobronchial ultrasound and mediastinal node sampling. She has a strong interest in digital innovation in healthcare and currently serves as a Digital Clinical Lead, supporting the development and implementation of digital health solutions to improve patient pathways, data integration, and remote monitoring within respiratory services.

Her work focuses on leveraging digital platforms, clinical informatics and data-driven care models to improve service efficiency, patient engagement and clinical outcomes across respiratory medicine. Dr Wickramasinghe contributes to clinical research, education and service development, and regularly participates in national and international scientific meetings and collaborative projects focused on improving care for patients with ILD and pulmonary vascular disease. She has been an NIHR grant holder conducting a multicentre national study on remote monitoring for lung health.

5: Data and digital-driven learning health systems for high- and low-middle-income countries.

Professor Krishnarajah Nirantharakumar, MBBS, MD, MRCP, MFPH, MPH,

Clinical Professor of Public Health & Health Data Science,

Department of AI in Preventive Medicine School of Life Course and Population Sciences, King's College London (KCL)

Current research interests:

Before joining KCL, I was the Team Lead for Health Informatics and Multimorbidity at the Institute of Applied Health Research. I managed a multidisciplinary team of over 40 professionals, including four professors, five associate professors, one assistant professor, two technology leads, and postdoctoral, doctoral, and predoctoral researchers, software engineers, data scientists, and implementation scientists. Most of the team, apart from the professors, associate professors, and technology leads, are funded by prestigious external organisations such as the Medical Research Council (MRC), National Institute for Health Research (NIHR), various charities, NHS Trusts, and industry partners. Until recently, even the core staff and technology leads were supported by external grants. I served as Director (Joint) of the Centre for Health Data Science.

A brief summary of his talk and key points:

A Learning Health System (LHS) is a healthcare system that continuously improves by learning from every patient encounter. At its core are three interconnected functions: (1) routine clinical care generates high-quality, structured data; (2) these data are analysed to produce reliable, actionable knowledge; and (3) this knowledge is translated back into clinical practice through decision support and system-level change.

This talk will focus on the underpinning structures required to operationalise an LHS in real-world clinical settings. First, robust and clinically meaningful electronic health records (EHRs) are essential to ensure that data captured during care are accurate, standardised, and reusable. Second, a scalable analytical infrastructure is needed to transform data into evidence. Our work with DExtER (Data Extraction for Epidemiological Research) demonstrates how epidemiological study designs can be encoded into computable formats, enabling rapid, reproducible research directly from routine care data. Third, mechanisms to implement knowledge—such as computable guidelines and clinical decision support systems—are critical to closing the loop and ensuring that insights influence practice.

Importantly, these components must be supported by appropriate governance, interoperability standards, and clinical engagement to ensure trust, usability, and sustainability.

Drawing on experiences from the UK and Sri Lanka, I will illustrate how aligning EHR design, analytics, and decision support within a coherent architecture can enable a functioning LHS. These examples highlight how both high-income and resource-constrained settings can leverage digital infrastructure and emerging technologies to deliver continuous learning and improved patient outcomes**.**

A selection of principal research publications:

1. *Mobley AR, Subramanian A, Champsi A, Wang X, Myles P, McGreavy P, Bunting KV, Shukla D, Nirantharakumar K, Kotecha D. Thromboembolic events and vascular dementia in patients with atrial fibrillation and low apparent stroke risk. Nat Med. 2024 Aug;30(8):2288-2294.*

2. *Subramanian A, Nirantharakumar K*, Hughes S, Myles P, Williams T, Gokhale KM, Taverner T, Chandan JS, Brown K, Simms-Williams N, Shah AD, Singh M, Kidy F, Okoth K, Hotham R, Bashir N, Cockburn N, Lee SI, Turner GM, Gkoutos GV, Aiyegbusi OL, McMullan C, Denniston AK, Sapey E, Lord JM, Wraith DC, Leggett E, Iles C, Marshall T, Price MJ, Marwaha S, Davies EH, Jackson LJ*

SLMDA oration 2026

Mr Supul Hennayake, MBBS, MS, FRCS, FRCSEd

"Seeing beyond: Lessons learned for Mental Wellbeing from Genital Reconstructive Surgery"

Current and past roles:
Lead Consultant Paediatric Urologist
Genital and Perineal Reconstructive Surgery Specialist
Royal Manchester Children's Hospital, Manchester
Examiner for Paediatric Surgery, JCIE
Program Director for Paediatric Surgery, NW Deanery
National TPD for Paediatric Urology

Key points from CV:

Posts held: Lead Consultant Paediatric Urologist, Genital and Perineal Reconstructive Surgery Specialist, Royal Manchester Children's Hospital, Manchester
Examiner for Paediatric Surgery, JCIE, Program Director for Paediatric Surgery, NW Deanery
National TPD for Paediatric Urology.
The passion is to cure, teach, train and share. Conducts regular workshops in Sri Lanka, Cairo and Jordan.

Summary/key points of the lecture:
Appreciate the wonder of this body.
See the misconceptions and wrong operations performed, causing lifelong misery and suffering to the children due to the failure to see and appreciate the actual pathology, but due to reliance on reputed textbooks, experts, majority beliefs and naïve logic.
How to see beyond not only in surgery but in the whole of medicine and in all walks of life.
Being free and having a healthy mind.

Selection of his latest publications:

1. Hennayake S, Marei MM, Bianchi A. Mechanism of correction of curvature by repair of spongiosum and bulbospongiosus muscle. J Pediatr Urol. 2025 Oct;21(5):1379-1380. doi: 10.1016/j.jpurol.2025.03.030. Epub 2025 Apr 5. PMID: 40253255.

2.Hennayake S, Marei MM, De Silva A, Mariotto A, Bianchi A. Bulbospongiosus Muscle Reconstruction in Proximal Hypospadias: Post Pubertal Function and Patient Satisfaction. J Pediatr Surg. 2025 Aug;60(8):162385. doi: 10.1016/j.jpedsurg.2025.162385. Epub 2025 May 24. PMID: 40419237.

3.Hennayake S, Abeygunasekara S, Bianchi A. Commentary on "Recurrent ventral curvature; hitherto unappreciated roles of spongiosum and bulbospongiosus muscle". J Pediatr Urol. 2025 Aug;21(4):1039-1040. doi: 10.1016/j.jpurol.2025.03.027. Epub 2025 Apr 5. PMID: 40253257.

4.Supul Hennayake, Mahmoud Marei Marei, Adrian Bianchi. Commentary on the STAC Technique: Preservation of the Bulbospongiosus Muscle and a Broader Perspective. J Pediatr Urol. 2025. doi.org/10.1016/j.jpurol.2025.02.045. Epub ahead of print. PMID: 40038034.

5.Hennayake S, Bianchi A. Commentary on adherence to follow up- Actively instigating post-pubertal follow up. J Pediatr Urol. 2025 Feb 20:S1477-5131(25)00111-1. doi: 10.1016/j.jpurol.2025.02.020. Epub ahead of print. PMID: 40038034.

Index of Free Paper Presentations

FREE PAPER ORAL PRESENTATION ABSTRACTS

In order of presentation. Content may have been revised since they were submitted to us.

A15: TOXOPLASMOSIS AMONG PATIENTS UNDERGOING HEMODIALYSIS AND RENAL TRANSPLANT RECIPIENTS IN SRI LANKA

Authors: WEERASOORIYA GPC[1], Manamperi A[2], Banneheke BMHA[1,3]

[1]Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka [2]Molecular Medicine Unit, Faculty of Medicine, University of Kelaniya, Sri Lanka [3]North Wales Medical School, Bangor University, United Kingdom.

Introduction: Toxoplasmosis is an important opportunistic infection in immunocompromised individuals, including patients with end-stage renal disease and renal transplant recipients. Enzyme-linked immunosorbent assay (ELISA) is the routinely used serological test to diagnose toxoplasmosis in Sri Lanka by determining antibody status. However, immune status may influence antibody responses and thereby affect test outcome. The objective of this study was to determine the toxoplasmosis status among patients undergoing hemodialysis (PUD) and renal transplant recipients (RTR).

Method: A cross-sectional study was conducted among 342 patients with renal conditions (228:PUD and 114: RTR). Blood samples were tested using T.gondii IgM and IgG qualitative ELISA followed by confirmatory PCR. Statistical analysis was performed to identify any association with T. gondii antibody levels in the two cohorts.

Results: Among PUD, 14.5% (33/228) had acute infection, 39.0% (89/228) had past infection, 45.6% (104/228) showed no evidence of infection, and 0.9% (2/228) were intermediate.Among RTR, 27.2% (31/114) had acute infection, 29.8% (34/114) had past infection, and 43.0% (49/114) showed no evidence of infection. The prevalence of past infection by serology was significantly higher among the PUD compared to RTR (P = 0.024).

Conclusion: A high prevalence of past toxoplasmosis among hemodialysis patients indicates a considerable burden of latent infection in this group. These latent infections pose a significant risk due to possible reactivation under immunocompromised conditions, potentially leading to severe outcomes such as cerebral toxoplasmosis. These findings highlight the need for targeted screening, close monitoring, and preventive strategies in immunocompromised patient populations such as PUD and RTR.

A25: IMMUNISATION COVERAGE AGAINST NATIONAL QMAS STANDARDS: ELIZABETH STREET SURGERY, BLACKPOOL, UNITED KINGDOM

Authors: Asela DISSANAYAKE (Academic Visitor, Specialty Registrar in Medical Administration, *Elizabeth Street Surgery, Blackpool, United Kingdom*, Prasanna ANTHONY, Hasini DISSANAYAKE

Background: Immunisation remains a cornerstone of public health in Blackpool, essential for preventing outbreaks and reducing morbidity. The Quality Management and Analysis System (QMAS) establishes national performance indicators (VI001–VI004) for primary care. For Elizabeth Street Surgery, aligning with these standards is vital for maintaining community herd immunity and securing practice quality funding within the Blackpool Central West network.

Objectives: To audit the immunisation uptake at Elizabeth Street Surgery against national QMAS targets for the 2025/26 period and to identify specific areas for clinical and administrative improvement.

Methods: This clinical audit was performed on January 23, 2026, extracting data via EMIS Web Population Reporting. The patient cohorts included infants, children aged 1–5, and adults aged

80. Performance was measured against national benchmarks: 96% for childhood indicators and 60% for shingles.

Results: Results demonstrated a high level of success in adult health, with Shingles (VI004) reaching 89% uptake, far exceeding the 60% target. Conversely, childhood immunisation targets were not met. Primary DTaP (VI001) reached 92%, MMR (VI002) reached 89%, and the Pre-school Booster (VI003) showed the widest gap at 83%. These figures sit below the 96% threshold required to maximise QMAS points and ensure robust public health protection.

Conclusions/Recommendations: Elizabeth Street Surgery demonstrates excellent engagement with older populations but requires targeted interventions to better engage younger families. Recommendations include: Launching an immediate administrative recall for the under-vaccinated childhood cohorts, offering "catch-up" clinics during evening or weekend hours to improve access for Blackpool's working parents, enhancing parent education to address localised vaccine hesitancy and establishing a quarterly re-audit cycle to ensure progress toward the 96% achievement threshold before the financial year-end.

A23: EFFICACY AND SAFETY OF XELIGEKIMAB AND VUNAKIZUMAB IN THE TREATMENT OF MODERATE-TO-SEVERE PLAQUE PSORIASIS: A SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS

Authors: Dalmi LANKA PELI GEDERA (Yr 3 Medical Student) *Bangor University***,** Hasini BANNEHEKE

Background: Moderate-to-severe plaque psoriasis is a chronic inflammatory disease. Interleukin 17 targeted therapies have demonstrated excellent efficacy in treating psoriasis. Xeligekimab, a dual IL-17A/F inhibitor, and vunakizumab, an IL-17A monoclonal antibody are approved therapies. This review aimed to evaluate the efficacy and safety of these two drugs in adults with moderate-to-severe plaque psoriasis.

Methods: A PRISMA-guided review of phase II/III RCTs using PubMed/Medline in adults (≥18 years) with moderate-to-severe plaque psoriasis treated with xeligekimab or vunakizumab assessed efficacy (by comparing Psoriasis Area and Severity Index-PASI and Physician's Global Assessment-PGA) and safety.

Results: Four RCTs met the inclusion criteria, comprising two trials of xeligekimab (one phase II and one phase III) and two trials of vunakizumab (one phase II and one phase III), with a total of 1,496 participants. In phase III trials, PASI 90 response rates at week 12 were 74.4% and 76.8% with xeligekimab and vunakizumab respectively, compared with 1.4% and 0.9% with placebo ($P < 0.001$). Efficacy was maintained through to week 52. Phase II trials showed PASI 75 response rates of 56.8%-90% and PASI 90 up to 67%, supporting phase III findings. Rates of serious adverse events in all studies were low (<1%), with mostly mild to moderate infections and injection site reactions being reported.

Conclusions: Xeligekimab and vunakizumab are highly effective and well-tolerated treatments for moderate-to-severe plaque psoriasis. Differences in study design, dosing regimens, and patient populations limit comparison between the drugs. Further long-term RCTs are needed to compare their efficacy and safety.

A32: IN-SILICO MODELLING AND INSIGHTS INTO THE PH-DEPENDENT DESTABILISATION OF CD36 IN ORAL CANCER

Authors: SUMETH M.W (Senior Lecturer in Biochemistry)**,** *Department of Biochemistry, Faculty of Medicine, Sabaragamuwa University, Sabaragamuwa, Sri Lanka*, and **Allen Lobo.** Co-authors: Primali Jayasooriya, Gayathri de Silva

Summary: Oral Squamous Cell Carcinomas (OSCC) present highly acidic extracellular matrices (ECM) driven by Warburg effect. For adaptation and survival, cancer cells use the scavenger receptor CD36 for lipid metabolism. Recently, CD36 has been observed to accumulate in the cytoplasm rather than the plasma membrane in late stages of OSCC. We hypothesised that this aberrant subcellular localisation was driven by the stress factors of the ECM, specifically the acidic tumour microenvironment disrupting CD36-membrane integration.

We investigated whether ECM acidity protonates conserved histidines within the CD36 extracellular loop, triggering electrostatic repulsion, salt-bridge disruption, and conformational destabilisation. All-atom molecular dynamics (MD) simulations were performed using GROMACS. CD36 structures at physiological alkalinity (pH 7.4) and tumour-specific acidic (pH 6.0) conditions were embedded in an asymmetric lipid bilayer (POPC:POPE:Cholesterol at 5:3:2), neutralised with 0.15 M KCl, and were simulated under NPT conditions at 310.15 K temperature. Trajectory analyses revealed that the acidic environment induced major structural instability. Specifically, pH 6.0 triggered a highly erratic backbone root-mean squared deviation RMSD that diverges from the stable pH 7.4 control after 3.0 ns, alongside elevated per-residue fluctuations (RMSF). Remarkably, 90.74% of residues showed elevated structural deviation from the control. Furthermore, internal hydrogen-bond occupancy steadily decreased over time at pH 6.0, driving widespread structural disintegration.

Conclusion: This pH-induced variance resulted in significant unfolding and conformational flexibility in the extracellular domain. These atomistic insights provide a mechanistic understanding of how the tumour microenvironment dynamically modulates CD36, potentially exposing novel pH-sensitive vulnerabilities for targeted cancer therapeutics.

A31: VESTIBULAR INFANT SCREENING IN CONGENITAL PERMANENT DEAFNESS

Authors: Sudhira A.B. RATNAYAKE (Consultant Audiovestibular Physician and Neuro-otologist[1], Honorary Clinical Senior Lecturer[2] and Training Programme Director[3]), Vasileios Gkiousias, Safaa Dawabah, John Wong, Annie McMahon, Julia Mercer, Maureen O'Hare, Soumit Dasgupta. *Alder Hey Children's NHS Foundation Trust[1], University of Liverpool[2] and NHS England (North-West)*[3]

Type of presentation: Quality improvement

Background: Newborn hearing screening has established early detection of congenital Permanent Childhood Hearing Impairment (PCHI). The anatomical, embryological and genetic correlations of the cochlea and vestibular organs (semicircular canals and otoliths) lead to 20-85% vestibulopathy prevalence in PCHI, resulting in delayed motor milestones and vestibular-visual-proprioceptive sensory mismatch. Worldwide, early vestibular screening is not widely available. This is a retrospective study of the UK's first Vestibular Infant Screening service in Liverpool (VIS-L) in a targeted congenital PCHI population in a tertiary paediatric specialist hospital.

Objectives: To assess the VIS-L outcomes. To obtain parental views.

Methodology: Retrospective case review in the first 6 VIS-L monthly clinics from May to December 2025. All children underwent cervical Vestibular Evoked Myogenic Potential (c-VEMP) test, remote-camera video Head Impulse Test (v-HIT) and modified chair rotation. An online questionnaire obtained parental feedback.

Results: Seven children (5 boys and 2 girls; median age = 19 months) completed VIS-L. Two (29%) had satisfactory results and five (71%) had abnormalities (3 in remote v-HIT and 2 in c-VEMP). All had normal chair rotation. Four were offered vestibular rehabilitation (2 via video-guided vestibular exercises, one vestibular physiotherapy and one play advice). Three required no vestibular input. Parents (3) completing the online questionnaire expressed their satisfaction.
Conclusions: This study supports the feasibility and acceptability of using novel technology for early detection and tailored vestibular rehabilitation in congenital PCHI. We continue prospective data collection and engage with national and international partners to transform care in newborns with audiovestibular sensory impairments.

A13: A FEASIBLE NATIONAL MEDICAL APPRAISAL MODEL FOR SRI LANKA BASED ON UK PRACTICE

Authors: Lasitha Isanka MALALASEKARA, (Senior Registrar in Medical Administration, Overseas Observer in the Chief Medical Office), *Sheffield Teaching Hospitals NHS Foundation Trust, Sheffield, United Kingdom*; Nick LYONS

Introduction: Sri Lanka's current appraisal of medical officers is largely linked to annual increments and lacks a structured national medical appraisal model. This study examined whether key features of the United Kingdom medical appraisal system could be adapted for Sri Lanka. Methods: A documentary review of 18 public documents was undertaken, including nine from the United Kingdom and nine from Sri Lanka. Documents were compared across key appraisal themes, and a feasibility framework was used to classify potential adaptations as green (ready for early implementation), amber (requiring modification), or red (not currently feasible). Results: The review identified 10 major themes relevant to appraisal reform. Five were considered feasible for early implementation, four required staged development, and one was not currently feasible. Findings suggest that Sri Lanka does not need a completely new platform. Instead, the existing Continuous Professional Development infrastructure could be strengthened by introducing a Personal Development Plan, structured supporting information, reflection, quality improvement activity, and hospital-level responsible leadership for oversight. Conclusion: Sri Lanka has a realistic opportunity to move from an increment-focused appraisal process towards a more supportive and developmental model. A phased approach using the current Continuous Professional Development platform, with pilot implementation and gradual strengthening of governance arrangements, may provide a practical foundation for future medical revalidation.

POSTER PRESENTATION ABSTRACTS

A1: A SERVICE EVALUATION OF THE ACCURACY OF FILTER DOSE DELIVERY AND COMPLIANCE TO DRUG DOSE ADJUSTMENT IN RENAL REPLACEMENT THERAPY IN THE ICU

Main Author: Cosmas TURUZA, (Junior Clinical Fellow), *Adult ICU, Manchester Royal Infirmary, Manchester University Foundation Trust*.
Co-authors: Chamini RANASINGHE, Prakriti SHRESTHA, James LUMSDEN, Sanchia BARNES audit supervisor), Prof Mahesh NIRMALAN (project mentor*)*

Introduction: Acute kidney injury (AKI) affects over half of UK ICU patients, with many requiring renal replacement therapy (RRT). Accurate delivery of the prescribed RRT dose is essential for achieving treatment goals, supporting renal recovery, and ensuring safe antimicrobial dosing. A

prospective evaluation was undertaken in a 20-bedded ICU at Manchester Royal Infirmary to assess machine dose accuracy, compliance with prescriptions, use of citrate anticoagulation, and appropriateness of antimicrobial dose adjustments, while also identifying educational needs among staff.

Methodology & Study: All ICU patients initiated on RRT between August and November 2025 were included. Data were obtained from electronic records and bedside nursing documentation. After a pilot review by the medical and pharmacy teams, anonymised data were collected and compared with local policy, national guidance, and manufacturer specifications. Quantitative analysis assessed compliance and variation, supported by thematic review of free-text entries.

Twenty patients were included. Refractory metabolic acidosis and hyperkalaemia were the main indications for RRT, and most patients had no prior RRT history. CVVH and CVVHDF were used in similar proportions. Citrate anticoagulation was used in 80% of cases with full compliance in monitoring, and filters lasted an average of 47 hours. Antimicrobial dosing was appropriately adjusted in 80.5% of patients. A consistent discrepancy was identified between prescribed and delivered RRT doses, with machines delivering higher-than-intended rates across common prescription ranges.

Conclusions: The evaluation demonstrated strong overall practice while highlighting opportunities for improvement, particularly in antimicrobial dosing and understanding dose-delivery discrepancies. There is also room to train junior medics on CRRT.

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A2: A RARE CAUSE FOR DEVELOPMENTAL DELAY WITH HYPOTONIA – A CASE REPORT OF CONGENITAL DISORDER OF GLYCOSYLATION TYPE 1A

Main Author: Chamodi WIJERATHNE, (Registrar in Paediatrics), *LRH, Colombo, Sri Lanka*.
Corresponding authors: Osman RATHNAYAKE, Lalani HETTIARACHCHI

Introduction: Congenital Disorders of Glycosylation (CDG) represent a complex group of inherited metabolic conditions characterised by impaired protein and lipid glycosylation. CDG type 1a (CDG-Ia), caused by phosphomannomutase 2 (PMM2) gene mutations and it is the most common subtype which is inherited autosomal recessively. This disorder disrupts N-linked glycoprotein synthesis, leading to multi-systemic developmental complications affecting neurological, muscular, and metabolic functions.

Description: A 5-year-old girl was initially presented at the age of six months with global developmental delay and multiple clinical manifestations. Clinical examination revealed profound hypotonia and characteristic facial dysmorphism, including a short nose, long philtrum, large ears, strabismus and hepatomegaly.

Investigations: Comprehensive metabolic screening was done, and genetic testing confirmed a heterozygous pathogenic variant in PMM2 gene which is consistent with CDG type 1a.

Progress: Additional complications developed while the condition progressed including moderate intellectual disability, recurrent respiratory infections, acute liver failure followed by chronic liver cell disease with coagulation abnormalities, chronic myopathy and seizures. As current treatment remains supportive the child is managed conservatively focusing on supportive care, nutritional supplementation, and multidisciplinary intervention to address neurological, haematological and developmental challenges.
Discussion: This case highlights the complex clinical spectrum of CDG-Ia, emphasising the importance of early diagnosis, comprehensive multidisciplinary management, and genetic counselling. While current treatment remains supportive, management should be intensified with worsening neurological symptoms, growth failure, cardiac issues, endocrine problems and abnormal lab values requiring urgent care.

A3: CHARGE SYNDROME PRESENTING WITH FATAL OUTCOME IN EARLY NEONATAL PERIOD: A CASE REPORT

Authors: Osman RATHNAYAKE, (Registrar in Paediatrics), *LRH Colombo Sri Lanka*, Chamod**i** WIJERATHNE, Chandana KEKULAWALA

Introduction: CHARGE syndrome is a rare genetic disorder characterised by Coloboma, Heart defects, Atresia of the choanae, Retardation of growth, Genital abnormalities, and Ear anomalies. We present a case of a newborn with CHARGE syndrome who succumbed to 72 hours of life due to multiple congenital anomalies.
Description: An infant born at 36 weeks of gestation to a 26-year-old multipara mother via normal vaginal delivery, who had antenatal brain ultrasound evidence of Holoprosencephaly. Birth weight was 2.065 kg (<3rd percentile). The infant presented with respiratory distress immediately after birth, requiring intubation. Physical examination revealed bilateral colobomas, low-set malformed ears, bilateral choanal atresia, apparent micrognathia, abnormal faces, limb anomalies, ambiguous genitalia and imperforated anus.
Investigations: Echocardiogram revealed large peri-membranous VSD, moderate PDA, small ASD and severe pulmonary hypertension. Ultrasound brain showed an absent corpus callosum and a single ventricle, which is suggestive of Holoprosencephaly.
Progress: Despite aggressive respiratory support and medical management, the clinical condition deteriorated rapidly. Multiple apnoeic episodes occurred, which were complicated by worsening of cardiac function. The neonate died at 72 hrs of life due to cardiorespiratory failure.
Discussion: This case highlights the severe entity of the CHARGE syndrome spectrum, where multiple congenital anomalies led to early mortality. The combination of choanal atresia, complex cardiac defects and Holoprosencephaly significantly contributed to the poor prognosis. Early recognition and multidisciplinary management are crucial, though some cases may prove fatal despite intervention. This case adds to the literature on severe presentations of CHARGE syndrome in the neonatal period.

A4: CLINICAL PRESENTATION AND MANAGEMENT OF A PATIENT WITH MUCOPOLYSACCHARIDOSIS TYPE 4-MOQUIO SYNDROME: A CASE REPORT

Main Author: Chamodi WIJERATHNE, (Registrar in Paediatrics), *LRH, Colombo, Sri Lanka*.
Corresponding authors: Osman RATHNAYAKE, Lalani HETTIARACHCHI

Introduction: Mucopolysaccharidosis (MPS) represents a group of rare inherited metabolic disorders due to mutations of genes coding for lysosomal enzymes causing defective lysosomal enzyme function which results in progressive accumulation of glycosaminoglycans in body tissues. These genetic conditions cause multisystem complications affecting physical development and neurological function.
Description: A 3-year-old male child born to consanguineous parents was presented to the ward with symptoms of chronic diarrhoea, and on further evaluation found to have mild intellectual impairment with prominent speech delay. Clinical examination demonstrated relatively large head, coarse facial features, enlarged tongue, short stature with relatively short upper segment. Skeletal radiographs showed dysostosis multiplex and lateral blunting of vertebral bodies of lumbosacral spine. Ophthalmology referral did not show evidence of corneal clouding. The cardiac echocardiogram was normal. The child's IQ level is normal. Serum enzyme assay is not available in Sri Lanka to differentiate the type; however, the overall clinical picture is compatible with MPS type IV.
Investigations: Urinary glycosaminoglycans levels were significantly high.
Progress: As enzyme replacement therapy is not available in Sri Lanka, child was managed with genetic counselling, speech therapy and Orthopaedic interventions. Long term follow-up was arranged with the involvement of multidisciplinary teams.
Discussion: This case emphasises the critical importance of early diagnosis and comprehensive management in MPS disorders. Timely intervention through genetic counselling and multidisciplinary care can potentially modify disease progression and improve patient quality of life. Continued research and advanced therapeutic strategies offer hope for better management of these complex genetic conditions.

A5: CONGENITAL EPULIS/NEUMANN'S TUMOUR: A CASE REPORT OF A RARE NEONATAL TUMOUR

Authors: **Osman RATHNAYAKE** (Registrar in Paediatrics), *LRH Colombo, Sri Lanka*, Chamodi WIJERATHNE, Nilam JIFFRY

Introduction: Congenital epulis (CE), also known as congenital granular cell tumour/Neumann's tumour/Congenital myoblastoma, is a rare benign soft tissue lesion that occurs almost exclusively in the alveolar ridges of newborns. The lesion typically presents as a pedunculated mass attached to the gingival mucosa, most commonly on the maxillary alveolar ridge. CE predominantly affects female neonates with a female-to-male ratio of 8:1. Although its aetiology remains unclear, the tumour is considered non-neoplastic and has an excellent prognosis with no reported recurrences after surgical excision.
Case Report: A term female neonate born by normal vaginal delivery and at birth while neonatal examination found to have a mass arising from hard palate. The mass measured approximately 1.3× 1.0 × 0.5 cm and was attached to the maxillary anterior alveolar ridge by a short pedicle. The lesion had a smooth surface, firm consistency, and pink colouration. It interfered with feeding but did not cause respiratory distress. Prenatal ultrasound scans were normal. The infant was otherwise healthy with no other congenital anomalies. The lump was excised with diathermy under local anaesthesia on the second week of life. The mass was removed completely with minimal bleeding. Histopathological examination revealed large granular cells with abundant eosinophilic cytoplasm and small, centrally located nuclei confirming the

diagnosis of congenital epulis. Post surgically there were not any complications and feeding difficulty also settled.

Conclusion: This case highlights the typical presentation of congenital epulis and confirms the effectiveness of early surgical management. The lesion's characteristic histological appearance and female predilection were consistent with previous reports. Despite its alarming appearance, CE follows a benign clinical course with excellent outcomes after simple excision. Early diagnosis facilitates prompt intervention and prevents feeding difficulties in neonates.

A:6 EARLY DIAGNOSIS OF MAPLE SYRUP URINE DISEASE IN A NEONATE WITH HYPERAMMONEMIA AND SEIZURES

Main Author: Chamodi WIJERATHNE, (Registrar in Paediatrics), *LRH, Colombo, Sri Lanka*.
Corresponding authors: Osman RATHNAYAKE, Nalika MENIKE, Milinda ATAPATTU.

Introduction: Maple syrup urine disease (MSUD) is a rare autosomal recessive disorder affecting branched-chain amino acid metabolism. Early diagnosis is crucial as delayed treatment can lead to irreversible neurological damage and death. This case emphasises the importance of metabolic screening in neonates with unexplained neurological symptoms.

Description: A 7-day-old term male neonate, born via normal vaginal delivery to non-consanguineous parents, presented with increased tonicity of all four limbs and a two-day history of poor feeding. Physical examination revealed hypertonia without other remarkable findings. Notably, the characteristic maple syrup urine odour was absent.

Investigations: Laboratory investigations showed elevated serum ammonia at 152 µmol/L. Arterial blood gas analysis, blood glucose, and electrolytes were normal with no metabolic acidosis. Plasma amino acid analysis revealed markedly elevated leucine + isoleucine (1304.177 µmol/L), leucine/phenylalanine ratio (26.63), leucine/alanine ratio (16.69), and valine (496 µmol/L), confirming MSUD diagnosis.

Progress: The infant was immediately started on branched chain amino acid restricted formula, supportive care, and anticonvulsants for seizure control. He showed gradual clinical improvement with normalisation of amino acid levels over subsequent weeks.

Discussion: This case demonstrates that MSUD should be considered in neonates presenting with unexplained hypertonia, seizures, and hyperammonaemia, even without the pathognomonic urine odour, which may be absent in early presentations. The absence of metabolic acidosis does not exclude the diagnosis. Early recognition through comprehensive amino acid profiling and prompt initiation of dietary management are essential for preventing irreversible neurological sequelae and improving long-term outcomes in this potentially fatal metabolic disorder.

A7: EARLY-ONSET JOUBERT SYNDROME: A CASE OF DEVELOPMENTAL DELAY AND CEREBELLAR SIGNS

Main Author: Chamodi WIJERATHNE, (Registrar in Paediatrics), *LRH, Colombo, Sri Lanka*).
Corresponding authors: Osman RATHNAYAKE, Lalani HETTIARACHCHI

Introduction: Joubert syndrome (JS) is a rare autosomal recessive genetic disorder with an estimated incidence of 1:80,000 to 1:100,000 live births. It is characterised by a specific malformation of the cerebellar vermis and brainstem, resulting in the pathognomonic "molar tooth sign" on axial MRI. The condition presents hypotonia, ataxia, developmental delay, abnormal eye movements, and irregular breathing patterns.

Description: An 8-month-old female infant born to consanguineous parents presented with global developmental delay and abnormal eye movements. The infant showed hypotonia, ataxia, oculomotor apraxia and convulsions. Physical examination revealed broad forehead, squint and low-set ears.
Investigations: Brain MRI revealed the pathognomonic "molar tooth sign" due to thick, horizontally oriented superior cerebellar peduncles and deep interpeduncular fossa, cerebellar vermis agenesis, ventriculomegaly and corpus callosum agenesis. Full blood count, liver function tests, and renal function tests were within normal limits. Ophthalmological examination showed retinal dystrophy
Progress: Over the next two years, the patient underwent intensive physical and occupational therapy with coverage of muscle relaxants. Motor development showed gradual improvement, achieving head control by 12 months and sitting with support by 24 months. Seizures were under control with anticonvulsants.
Discussion: This case highlights the classical presentation of Joubert syndrome with the characteristic molar tooth sign on neuroimaging. Early diagnosis facilitated prompt intervention through multidisciplinary approach. The case emphasises the importance of regular monitoring for associated complications and intervening early to achieve the best possible outcomes

A8: HETEROZYGOUS APOA5 VARIANT CAUSING EARLY-ONSET HYPERTRIGLYCERIDEMIA IN AN INFANT: A CASE REPORT

Main Author: Chamodi WIJERATHNE, (Registrar in Paediatrics*), LRH, Colombo, Sri Lanka*).
Corresponding authors: Osman RATHNAYAKE, Lalani HETTIARACHCHI

Introduction: Apolipoprotein A5 (APOA5), encoded by the APOA5 gene on chromosome 11q23, is crucial in triglyceride metabolism through enhancement of lipoprotein lipase activity and reduction of hepatic VLDL-triglyceride production. Variants in APOA5 are associated with familial hypertriglyceridemia, increasing risks of premature atherosclerosis and acute pancreatitis. While heterozygous forms show variable penetrance, early identification in paediatric populations is vital as they can manifest with severe hypertriglyceridemia in infancy.
Description: A 12-month-old term baby boy born to non-consanguineous parents presented with a history of poor weight gain, global developmental delay with dysmorphic features of bulbous nasal tip, broad forehead and triangular face. Incidentally found to have lipemic blood during routine screening. On eye examination Lipemic vessels noted. Family history revealed early-onset cardiovascular disease in maternal grandfather.
Investigations: Initial laboratory findings showed Severely elevated triglycerides level of 3725 mg/dL, Total cholesterol level of 270 mg/dL and HDL level of 4 mg/dL. Normal liver and thyroid function tests. Genetic testing revealed a heterozygous variant in APOA5 gene (c.1131T>C).
Progress: The patient was treated with Omega three fatty acids, Statins and fenofibrates. Two-months follow-up showed reduction in triglycerides to 836 mg/dL. Regular monitoring was established with a multidisciplinary team involvement.
Discussion: This case emphasises the significance of genetic factors in paediatric hypertriglyceridemia. Early identification and dietary intervention are crucial for preventing complications such as pancreatitis and cardiovascular disease. Long-term follow-up will be essential to optimise management strategies with the help of genetic counselling, as most cases are autosomal recessively inherited.

A9: MEGALOBLASTIC ANAEMIA IN EARLY INFANCY: A CASE REPORT

Authors: **Osman RATHNAYAKE**, (Registrar in Paediatrics), *LRH, Colombo, Sri Lanka*. Chamodi WIJERATHNE, Nilam JIFFRY

Introduction: Megaloblastic anaemia in early infancy due to vitamin B12 deficiency is a rare condition. Vitamin B12 deficiency in paediatric populations can cause severe neurological and haematological consequences. During exclusive breast-feeding period, the only source of vitamin B12 is breast milk. Maternal dietary practices, such as strict veganism, can significantly impact infant nutritional status due to limited B12 sources. This case report highlights the importance of nutritional counselling and monitoring for infants born to mothers following restrictive dietary regimens.

Description: A 6-week-old male infant was presented with symptoms of vomiting and poor weight gain. The infant's mother followed a strict vegan diet throughout pregnancy and during breastfeeding, with minimal supplementation. Physical examination revealed pallor and growth retardation.

Investigations: Laboratory investigations demonstrated Haemoglobin 8 g/dL, MCV 100 fL, serum vitamin B12 levels less than 60 pg/mL of both mother and infant. Peripheral blood smears of both mother and infant revealed characteristic megaloblastic changes.

Progress: Infant was treated with intramuscular vitamin B12 supplementation and dietary counselling was given to the mother. Follow-up assessment in 3 months after treatments demonstrated normalised haemoglobin and MCV with improvement of growth.

Discussion: This case highlights the critical need for nutritional monitoring and B12 supplementation for mothers following restrictive dietary patterns. Early detection and intervention are crucial in preventing potentially irreversible neurological and haematological complications associated with vitamin B12 deficiency in infants.

A10: MOSAIC TURNER SYNDROME WITH TRIPLE X/MONOSOMY X PATTERN IN AN ADOLESCENT: CASE REPORT

Main Author: Chamodi WIJERATHNE, (Registrar in Paediatrics), *LRH, Colombo, Sri Lanka*, **Corresponding authors:** Osman RATHNAYAKE, Neel Kannangara

Introduction: Turner syndrome is a genetic disorder affecting females, characterised by the complete or partial absence of one X chromosome. Occurring in approximately 1 in 2,500 female births, it presents with short stature, delayed puberty, and various manifestations. Mosaic patterns account for 15-20% of cases.

Description: A 13-year-old girl presented with short stature and delayed menarche. Height measured 135 cm (below 3rd percentile), weight 28 kg, with absent secondary sexual characteristics at Tanner stage 1. Physical examination revealed webbed neck, low posterior hairline, shield chest, and cubitus valgus. Cardiac examination and lymphedema assessment were normal.

Investigations: Laboratory investigations showed elevated follicle-stimulating hormone and luteinizing hormone levels, indicating primary ovarian dysgenesis. Cytogenetic analysis revealed mosaic karyotype 47,XXX(22)/45,X(11), demonstrating both triple X and monosomy X cell lines. Echocardiography and renal ultrasound showed normal findings.

Progress: Growth hormone therapy and oestrogen replacement therapy were planned to address short stature and induce pubertal development.

Discussion: This case demonstrates Turner syndrome with rare mosaic karyotype 47,XXX/45,X . The patient exhibited predominantly Turner syndrome phenotype with characteristic physical features and ovarian dysgenesis. The manifestations of triple X syndrome might not manifest early years of life, where it is known to cause premature ovarian failure. The case emphasises the importance of comprehensive clinical evaluation and cytogenetic analysis in growth disorders, as phenotypic expression may not correlate with karyotypic complexity. Early diagnosis through systematic evaluation enables timely hormonal interventions to optimise growth potential and support appropriate pubertal development in affected individuals. Furthermore, definitive diagnosis will be helpful in the counselling and future surveillance for anticipated implications of a particular condition.

A11: A PATIENT WITH PERSISTENT THYROTOXICOSIS; OUR EXPERIENCE AND OUR HYPOTHESIS

Authors: M. Weerakoon (Junior Clinical Fellow), S. Dwivedi, M Sehemby, K Dhamodharan, A Garnham, HN Buch. *Departments of Endocrinology, Surgery and Anaesthesiology, New Cross Hospital, Wolverhampton WV10 0QP*

Background: Persistent thyrotoxicosis despite medical therapy remains a significant clinical challenge and is frequently attributed to poor adherence. We report a case of severe thyrotoxicosis with major physical and psychological consequences, successfully treated with thyroidectomy despite persistently elevated thyroid hormone levels. We also propose that the neuropsychiatric effects of thyrotoxicosis may contribute to non-adherence, creating a self-perpetuating cycle.

Case: A 35-year-old woman with Graves' disease (diagnosed in 2015; TSH <0.005 mIU/L, T4 80.9 pmol/L, T3 >30.7 pmol/L) remained thyrotoxic despite maximal doses of carbimazole and propylthiouracil. Adherence to medication, investigations, and follow-up was inconsistent despite prescription records confirming dispensing. By 2024, she had lost >20 kg and developed features of apathetic thyrotoxicosis. Radioiodine therapy was discussed but declined by the patient. She agreed to thyroidectomy and was admitted for two weeks of pre-operative preparation with Lugol's iodine under supervision. However, reliable supervision of ingestion proved difficult and thyroid hormones remained elevated (T4 24.3 pmol/L, T3 17.9 pmol/L). Although surgery carried significant risk, this was considered lower than the risk of ongoing uncontrolled thyrotoxicosis. Invasive monitoring with arterial and femoral venous lines was instituted, and remifentanil–esmolol infusions maintained cardiovascular stability. She was transferred to ICU post-operatively for 24 hours and the remainder of her recovery was uneventful.

Conclusion: Thyroidectomy may be considered despite incomplete biochemical control when clinically necessary, provided multidisciplinary planning and peri-operative critical care support are available. Addressing psychological wellbeing may also be important in managing severe hyperthyroidism.

A12: WHOLE-GENOME DOUBLING AND GENOMIC INSTABILITY IN MALE BREAST CANCER: INSIGHTS FROM THE MSK-IMPACT 50K (2026) COHORT

Authors: Nadeeka Dimuthu Kumari RANADEVA, (Senior Lecturer, MSc in Molecular Pathology, Masters in Medical Statistics, PhD -Reading), *KIU, Sri Lanka***,** Charuni Tharindi Nayantharavi DISSANAYAKE

Background: Male breast cancer is a rare malignant disease, with few studies investigating the genomic landscape of the disease. Whole genome doubling (WGD), a hallmark of tumorigenesis, has been well investigated in other cancers, whereas the role of WGD has rarely been explored in the context of male breast cancer. The purpose of the present study was to identify the clinico-genomic profile of male breast cancer using a large real-world sequencing data set. Methods -The cases of male breast cancer were extracted from the MSK IMPACT 50k (2026) cohort, which contains next-generation sequencing data from a large population of cancer patients. After data cleaning, curation, and identification of unique patients with male breast cancer, there were 62 patients included in this study. The variables included were tumour mutation burden, mutation count, ploidy, fraction genome altered, and WGD status, which were analysed for statistical differences between WGD-positive and WGD-negative tumours using non-parametric and categorical tests, as well as for survival using Cox proportional hazards modelling.
Results: The median age at diagnosis was 55 years (IQR: 47–63). Most tumors were primary (66.1%), while 33.9% were metastatic. Whole-genome doubling was identified in 43.5% (27/62) of cases. WGD-positive tumours demonstrated significantly higher: Tumour mutational burden (median higher; $p = 0.0033$), Mutation count ($p = 0.0136$), Ploidy ($p < 0.000001$), Fraction genome altered (FGA) ($p = 0.00002$). The data show that WGD-positive tumours present with increased genomic instability compared to other tumours. The WGD groups showed no statistically significant differences in age and metastatic status and overall survival. The Cox regression analysis showed a non-significant trend toward lower survival for WGD-positive tumours with an HR of 1.36 and a p-value of 0.5059.
Conclusions: The MSK-IMPACT 50k (2026) cohort analysis shows that whole-genome doubling creates a separate category of male breast cancer which displays higher levels of genomic instability. The study found no statistically significant survival differences between the two groups, but the strong connection between WGD and multiple genomic instability markers indicates WGD may influence tumour development. The research provides new information about the genetic structure of male breast cancer while proposing WGD as a potential biomarker for future research.

A14: IMPROVING NEONATAL CARE THROUGH DATA-DRIVEN AUDIT: DOCUMENTATION COMPLIANCE IN THE CHILD HEALTH DEVELOPMENT RECORD (CHDR)

Authors: Udari **RUWANPATHIRANA** (Registrar in Paediatrics*), National Hospital, Galle*, Ruvini **FONSEKA**, Rohan **WICKRAMASINGHE**

Introduction: The Child Health Development Record (CHDR) plays a vital role in ensuring continuity of neonatal care in Sri Lanka. Accurate documentation supports growth monitoring, early risk identification, screening follow-up, and medico-legal safety. However, incomplete documentation may compromise quality of care and long-term outcomes.
Methods: A prospective clinical audit was conducted over five weeks at the Well Baby Clinic, GSFHW. Eighty-five first-visit infants with CHDRs completed by healthcare staff were evaluated using a structured proforma. Ten key neonatal parameters from the first and seventh pages of the CHDR were assessed for documentation completeness.
Results: Documentation compliance was highest for birth weight (98%), occipitofrontal circumference (75%), and birth length (75%). Moderate compliance was observed for APGAR score (69%), vitamin K administration (88%), and breastfeeding establishment (68%). Significant

gaps were identified in discharge weight documentation (48%) and congenital hypothyroidism screening (61%). Among infants with identified risk factors (n=54), only 28% had documentation indicating the need for special care. Additionally, 25% of records lacked documentation for critical congenital heart disease screening, highlighting a key patient safety concern.
Conclusion: This audit reveals critical gaps in essential neonatal documentation despite good recording of basic parameters. Translating audit data into action, through structured checklists, staff training, accountability, and potential digital documentation systems, can enhance data quality, improve clinical decision-making, and strengthen continuity of neonatal care.

A16: KNOWLEDGE AND PRACTICES REGARDING FEBRILE CONVULSIONS AND THEIR ASSOCIATION, AMONG PRIMARY CAREGIVERS OF CHILDREN ADMITTED FOR FEVER AT LADY RIDGEWAY HOSPITAL, SRI LANKA

Authors: Disshawrni RAVINDRAN (Student - Year 4), *Faculty of Medicine, University of Colombo*, Vindya DISANAYAKA, Dineshika DISANAYAKA, Sandil DISSANAYAKE

Background: Febrile convulsions (FCs) are the commonest type of seizures among children, which are a leading cause of caregiver anxiety and inappropriate emergency responses. In Sri Lanka, data on caregiver practices and knowledge remain scarce, and there is no evidence on determinants of caregiver practices, limiting the development of targeted interventions.
Objectives: To determine knowledge and practices regarding FCs, their association and identify factors influencing practices among primary caregivers of children admitted for fever at Lady Ridgeway Hospital, Sri Lanka.
Methods: A descriptive cross-sectional study with an analytical component was conducted among 122 primary caregivers of children aged 6 months to 5 years at Lady Ridgeway Hospital, the largest paediatric tertiary care hospital in South Asia and Sri Lanka. Participants were recruited using systematic random sampling. Data were collected via a structured, pre-tested, expert-validated, interviewer-administered questionnaire in local languages. Knowledge and practice were quantified using expert-validated scoring systems. Associations were analysed using descriptive statistics, Fisher's exact tests and Chi-square tests (SPSS v27), with $p<0.05$ considered significant.
Results: Most caregivers demonstrated moderate knowledge (55.7%), while 28.7% had low knowledge and only 15.6% showed high knowledge. Misconceptions were prominent, with 71.3% believing recurrent FCs cause brain damage. Although 70.5% reported overall good practices regarding fever management and immediate response to FC, harmful responses such as shaking the child (68.9%), attempting to open the mouth (67.2%) and inserting objects into the child's mouth (29.5%) were common. Only a small proportion of participants practised safe measures such as placing the convulsing child in the left lateral position (13.1%). Higher knowledge was strongly associated with safer practices ($\chi^2=16.868$, $p<0.001$). Educational attainment, marital status, and first language significantly influenced practices

A17: EPIDEMIOLOGY OF DELIRIUM IN ELDERLY INPATIENTS: PREVALENCE AND ASSOCIATED FACTORS IN A SRI LANKAN TERTIARY HOSPITAL

Authors: **Shane JAYASUNDARA** (Acting Consultant Psychiatrist), *Base Hospital Thambuththegama, Sri Lanka),* Dileepa EDIRIWEERA, Chathura ABEYSINGHE, Kavindu DHARMARATHNE, Amal SAMARASINGHE, Amila ISURU

Background: Delirium is a common yet under-recognised neuropsychiatric syndrome among older inpatients, associated with substantial morbidity, mortality, and healthcare burden. As hospital admissions among older adults continue to rise globally, understanding the prevalence and contributing factors is essential to improving geriatric care.
Aims: To estimate the prevalence and associated factors of delirium among surgical and medical inpatients aged 65 years or older at Teaching Hospital Anuradhapura, Sri Lanka.
Methods: A descriptive cross-sectional study was conducted among patients aged 65 years and older admitted to general medical and surgical wards. Systematic random sampling was used. Delirium screening was performed using the Confusion Assessment Method (CAM), with diagnostic confirmation based on DSM-5 criteria. Associated factors were identified using binary logistic regression.
Results: Among 233 older adult inpatients, the prevalence of delirium was 18% (n=42; 95% CI 13.3–33.6%). The mean age of affected patients was 76.6 years (SD=6.6), with a mean hospital stay of 6.7 days (SD=6.1). Hypoactive delirium was the most common subtype (40.5%), followed by hyperactive (33.3%) and mixed forms (26.2%). Significant associated factors included, age > 65 years (OR=1.19, p=0.002), current infections (OR=10.17, p<0.001), nasogastric feeding (OR=49.99, p=0.002), assisted ventilation (OR=6.75, p=0.007), history of delirium (OR=9.44, p=0.002), longer hospital stay (OR=1.10, p=0.042), and sleep disturbances (OR=6.44, p=0.003).
Conclusions: Nearly one in five older inpatients had delirium. Significant associations with infection, invasive interventions, prior delirium, prolonged hospitalisation, and sleep disturbances highlight the importance of routine screening, early identification, and targeted preventive strategies in geriatric inpatient care.

A18: METHOD DEVELOPMENT OF OPTIMISATION OF MULTIPLEXED IMMUNOFLUORESCENCE PANEL & TO EVALUATE MIS-MATCH REPAIR STATUS USING CANCEROUS ENDOMETRIAL EXPLANTS

Authors: **Emily CURTIS-JONES** (Student Yr 3), *North Wales Medical school*, Gareth MILES, Aamina AHMED

Introduction: Mismatch repair (MMR) proteins correct DNA replication errors, and deficiencies (dMMR) are linked to endometrial cancer and hereditary conditions like Lynch syndrome. Current diagnostics require multiple tissue sections and are time-consuming. This project aimed to develop a multiplex immunofluorescence (mIF) panel to detect multiple MMR proteins simultaneously on a single patient-derived endometrial cancer explant, optimise antibodies for four clinically relevant MMR proteins (MSH2, MSH6, PMS2, MLH1), develop duplex and multiplex staining panels, and assess their ability to determine MMR status in unknown samples.
Methods: Antibody optimisation was performed using immunohistochemistry with DAB staining to establish optimal antigen retrieval, concentrations, and incubation times. These optimised conditions were applied to immunofluorescence staining with fluorophore-tagged Opal dyes. Duplex panels (MSH2/MSH6 and PMS2/MLH1) were developed before combining all four antibodies into a single multiplex panel. Slides were digitised using a multispectral imaging system and analysed with Phenochart software. The panel was then applied to six patient-derived explants with unknown MMR status.
Results: Optimisation identified suitable conditions for each antibody, enabling successful duplex and four-antibody multiplex staining on a single tissue section. Distinct, specific staining patterns were observed for each MMR protein. In six unknown samples, the panel correctly

identified both proficient MMR (pMMR) and dMMR cases, achieving 100% concordance with pathology reports.

Conclusions: Multiplex immunofluorescence detects multiple MMR biomarkers in a single tissue section while preserving patient material. Further optimisation and validation in larger cohorts are warranted, but this approach shows strong potential to improve MMR diagnostics and support personalised cancer treatment strategies.

A19: PREVALENCE AND RISK FACTORS OF BRAIN MALIGNANCY AMONG A GROUP OF ORGAN CANCER PATIENTS AT THE NATIONAL CANCER INSTITUTE, MAHARAGAMA, SRI LANKA

Authors: **Chamathya GUNAWARDANE**[1], Yasindu PERERA, Bihani JAGODA[2], Sahan SENEVIRATHNA, Janani NATASHA, Pubudini WEERASOORIYA[3], Manjula SHANMUGANADAN[4], Hasini BANNEHEKE.

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Background: Brain malignancies among patients with solid organ cancers are relatively rare but associated with significant morbidity and mortality. Evaluating their prevalence and risk factors is important to improve early detection and guide effective management.

Objective: To assess the risk factors associated with brain cancer in non-haematological organ cancer patients, emphasising demographic, genetic/hereditary, environmental, and lifestyle influences.

Methods: A cross-sectional study was conducted among 317 patients admitted to Apeksha Hospital, Maharagama from May 2025 to August 2025 with organ-specific malignancies. Data was collected using structured questionnaires on sociodemographic, environmental exposures, lifestyle habits. Brain cancer cases were confirmed via clinical diagnosis. Statistical analyses included descriptive statistics and Spearman correlation.

Results: Brain cancer prevalence was 4.1% (13/317), with a higher prevalence being observed among participants living in asbestos roofed dwellings 69.2% (9/13). Among the 13 brain cancer patients 53.8% (7/13) reported the use of chemical containing personal care products. Age ($r = 0.124$, $p < 0.01$) and family history ($r = 0.164$, $p < 0.01$) demonstrated a significant positive correlation with prevalence, while gender, smoking, and dietary/zoonotic exposures showed no significant associations ($p > 0.01$).

Conclusion: Brain cancer constitutes a small proportion of organ-related malignancies in Sri Lanka. Environmental factors & lifestyle habits including asbestos roofing and chemical personal care products may warrant further investigation. The positive association with family history highlights a potential genetic or hereditary contribution. These findings provide a baseline for future epidemiological studies and target surveillance, particularly through studies involving larger sample sizes.

Keywords: Organ Cancer, Brain cancer, Epidemiology, Prevalence, Risk factors, Sri Lanka

A20: UNDERSTANDING PARENTAL STRESS IN THE NICU: USING DATA TO REDESIGN THE NICU EXPERIENCE

Authors: **Udari RUWANPATHIRANA** (Registrar in Paediatrics), *National Hospital Galle*, Ruvini FONSEKA, Rohan WICKRAMASINGHE

Background: Admission of a newborn to the Neonatal Intensive Care Unit (NICU) is an emotionally overwhelming experience that disrupts bonding and challenges early parental roles. This clinical audit aimed to quantify parental stress using the validated Parental Stressor Scale: NICU (PSS:NICU) and identify key stress domains to inform family-centred care improvements.
A cross-sectional descriptive audit was conducted among 25 mothers where their newborns were admitted to NICU at a Sri Lankan tertiary maternity hospital. Stress was assessed across four domains—infant appearance, parental role alteration, sights and sounds, and communication—using a 1–5 Likert scale. Mean scores were categorised as low (1.0–1.9), mild (2.0–2.9), moderate (3.0–3.9), and severe (4.0–5.0).
Results: The overall mean stress score was 1.73 (low stress). However, domain-specific analysis revealed nuanced burdens. The infant appearance domain (2.24) recorded the highest stress, with procedural pain (~2.8), sudden clinical changes (~2.7), and attached medical devices (~2.6–2.7) as major triggers. The parental role alteration domain (2.08) showed separation as the single most distressing factor (3.36), exceeding all other stressors. Environmental stress was lower (1.64), with machine noise (~2.0) and alarms (~1.9) causing mild distress. The communication domain (1.16) showed the lowest stress, though gaps in clarity and information remained (~1.3).
Conclusions: Overall, emotional stress outweighed environmental stress, with visual triggers and separation dominating parental distress. What parents see and feel had greater impact than what they hear or are told. Targeted interventions—minimising separation, preparing parents for procedures, visual counselling, and sustaining effective communication—are essential to improving the NICU experience.

A21: KNOWLEDGE AND PRACTICES ON MENSTRUAL HYGIENE AMONG FEMALE UNDERGRADUATES OF THE UNIVERSITY OF KELANIYA

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Introduction: Menstrual health is a key aspect of women's well-being, yet gaps in knowledge and hygienic practices persist among young women, including university students. These challenges, influenced by cultural, economic, and infrastructural barriers can adversely affect women's health, dignity, and academic participation. Understanding the level of knowledge and hygiene practices among female university students is important to identify gaps and to do targeted health and educational interventions.
Objective: To assess the knowledge and practices regarding menstrual hygiene among female students at the University of Kelaniya.
Methodology: A descriptive cross-sectional study was carried out among 486 female students at the University of Kelaniya, Sri Lanka. A preplanned self-administered questionnaire was introduced to gather information and was analysed.
Results: Participants scoring >70% were classified as having good knowledge and practices. While 70% (n=340) demonstrated good knowledge of menstrual hygiene, only 7.6% (n=38) reported good practices, with a significant positive association between knowledge and practice ($p<0.001$). Sanitary napkins were the most used product (84.4%, n=477). Disposal methods varied, with 42.6% burning and 21.2% discarding with general waste. Menstrual practices were

significantly associated with religion and faculty ($p<0.001$), with higher mean scores observed among Christians (5.51) and students from the Faculty of Computer and Technology (5.3).
Conclusion: The study reveals that most of the students have good knowledge of menstrual hygiene even though good practices are not common. There is a need for improvement in education and awareness on good practices such as use of sanitary napkins, proper waste disposal and sustainable practices.

A22: PSYCHOLOGICAL IMPACT OF FINANCIAL STRESS AMONG MEDICAL UNDERGRADUATES AT THE FACULTY OF MEDICINE, UNIVERSITY OF KELANIYA, SRI LANKA

Authors: **DILHARA M.K.A** (Medical Undergraduate-Final year), *University of Kelaniya, Sri Lanka*, PERERA W.N.S, DILUXSHI S, DINESHIKA N.T, DISSANAYEKE D.M A.M, DILSHAN H.A.T.P

Background: The recent economic crisis has substantially increased the cost of living, placing considerable financial pressure on undergraduates. Medical undergraduates are particularly vulnerable due to prolonged training, heavy academic workload, and limited opportunities for supplementary income, affecting psychological well-being, academic engagement, and social functioning.
Objective: To assess the psychological impact of financial stress among medical undergraduates, focusing on emotional, cognitive, and social functioning.
Methods: A descriptive cross-sectional study was conducted among 307 medical undergraduates using a structured self-administered questionnaire. The 32-item questionnaire assessed emotional, cognitive, social, and physical effects of financial stress. Responses were recorded on a five-point Likert scale. Descriptive statistics including mean and standard deviation were calculated.
Results: Participants comprised 62.2% males and 36.2% females. The mean financial stress score was 3.36 (SD = 0.88), indicating moderate stress. Emotional distress was prominent: feelings of depression (SD = 1.14), hopelessness (M = SD = 1.10), and sadness (SD = 1.11) were common. Anxiety-related symptoms included worry (SD = 1.09) and irritability (SD = 1.08). Cognitive effects manifested as difficulties in concentration (SD = 1.06) and reduced academic engagement (SD = 1.08). Social functioning was affected, with frequent avoidance of social interactions (SD = 1.08). Physical manifestations included sleep disturbances, somatic complaints (SD = 1.12), and increased heart rate (SD = 1.12).
Conclusion: Financial stress is prevalent among medical undergraduates and is associated with significant emotional, cognitive, and social challenges. These findings highlight the real-life impact of economic pressures on students and underscore the need for institutional interventions to support mental well-being, particularly during periods of financial hardship.

A23: EFFICACY AND SAFETY OF XELIGEKIMAB AND VUNAKIZUMAB IN THE TREATMENT OF MODERATE-TO-SEVERE PLAQUE PSORIASIS: A SYSTEMATIC REVIEW OF RANDOMISED CONTROLLED TRIALS

Authors: Dalmi LANKA PELI GEDERA (Yr 3 Medical Student) *Bangor University***,** Hasini BANNEHEKE

Background: Moderate-to-severe plaque psoriasis is a chronic inflammatory disease. Interleukin 17 targeted therapies have demonstrated excellent efficacy in treating psoriasis. Xeligekimab, a dual IL-17A/F inhibitor, and vunakizumab, an IL-17A monoclonal antibody are approved

therapies. This review aimed to evaluate the efficacy and safety of these two drugs in adults with moderate-to-severe plaque psoriasis.

Methods: A PRISMA-guided review of phase II/III RCTs using PubMed/Medline in adults (≥18 years) with moderate-to-severe plaque psoriasis treated with xeligekimab or vunakizumab assessed efficacy (by comparing Psoriasis Area and Severity Index-PASI and Physician's Global Assessment-PGA) and safety.

Results: Four RCTs met the inclusion criteria, comprising two trials of xeligekimab (one phase II and one phase III) and two trials of vunakizumab (one phase II and one phase III), with a total of 1,496 participants. In phase III trials, PASI 90 response rates at week 12 were 74.4% and 76.8% with xeligekimab and vunakizumab respectively, compared with 1.4% and 0.9% with placebo ($P < 0.001$). Efficacy was maintained through to week 52. Phase II trials showed PASI 75 response rates of 56.8%-90% and PASI 90 up to 67%, supporting phase III findings. Rates of serious adverse events in all studies were low (<1%), with mostly mild to moderate infections and injection site reactions being reported.

Conclusions: Xeligekimab and vunakizumab are highly effective and well-tolerated treatments for moderate-to-severe plaque psoriasis. Differences in study design, dosing regimens, and patient populations limit comparison between the drugs. Further long-term RCTs are needed to compare their efficacy and safety.

A24: STREAMLINING THE VEIN-TO-REPORT CYCLE: AN INTEGRATED APPROACH TO ENHANCING LABORATORY EFFECTIVENESS AT DGH MATALE

Authors: Asela DISSANAYAKE, (Academic Visitor, Specialty Registrar in Medical Administration), *Elizabeth Street Surgery, Blackpool, United Kingdom*

Introduction: Effective laboratory processes contribute to timely diagnosis and treatment. Laboratory process effectiveness is multidimensional which includes quality, timeliness, and cost efficiency. Laboratory review meetings in District General Hospital (DGH), Matale, had identified quality-related complaints, prolonged waiting times for investigation reports, and a notable number of unattended investigation reports.

Objective: To improve the effectiveness of the laboratory investigation process in the Outpatient Department (OPD) at DGH Matale.

Methods: An interventional project was conducted from January to November 2023 at DGH Matale. Laboratory process quality was assessed through key informant interviews with nursing officers, medical laboratory technologists, patients, and OPD medical officers. Two checklists evaluated timeliness through Turn-Around Time (TAT) of FBC, ESR, UFR, and cost aspects through daily unattended reports, while a self-administered questionnaire assessed patient satisfaction. Data collected before and after the project were analysed using NVivo software for qualitative data and SPSS for quantitative data. Interventions developed with stakeholders to address quality, cost, and timeliness gaps by developing guidelines, request forms, sampling manuals, SOPs, non-conformity reporting forms, establishing electronic report mechanisms, and relocating the OPD lab to its premises.

Output/ outcome: Streamlining the laboratory investigation process improved the effectiveness of the process. Unattended investigation reports decreased significantly from 19% to 2.4%($\chi^2(df=1)=64.747;p=0.00$). Mean TAT for all three investigations reduced significantly; for FBC from 169.14 to 79.7 minutes ($Z=235.84;p=0.000$), ESR from 224.31 to 130.34 minutes

(Z=151.25;p=0.000), and UFR from 149.22 to 97.32 minutes (Z=90.86;p=0.000). Overall, patient satisfaction scores increased significantly from 71.2% to 79.8% (Z=7.34; p=0.000).
Conclusion and Recommendation: Interventions improved the OPD laboratory investigation process effectiveness in DGH, Matale. Communication and collaboration between the laboratory and OPD are recommended to improve the overall process effectiveness.
Keywords: Laboratory effectiveness, Quality, Timeliness, Cost,

A26: THE SHAME-TRAUMA CYCLE IN DYSLEXIA: PSYCHOSOCIAL INSIGHTS FROM SRI LANKA AND A TECHNOLOGICAL FRAMEWORK
Authors: Manandi Wenani HERATH (Student, Year 3), *University of Campania Luigi Vanvitelli, Naples, Italy*, Samudra SENARATH.
Introduction: Dyslexia is widely recognised for its impact on literacy. In Sri Lanka, lack of awareness often causes academic struggle to be internalised as a sense of personal inadequacy. This creates a "Shame-Trauma Cycle" where the psychological "interpersonal bridge" connecting the child to caregivers and teachers is disrupted, leading to a defective self-identity.
Methods: A secondary thematic synthesis was conducted using raw data from two previous school-based studies in the Western Province, Sri Lanka (n=60). By reanalysing quantitative results from standardised metrics; the Spence Children's Anxiety Scale, Culture-Free Self-Esteem Inventories, and the Parental Stress Scale through the lens of Kaufman's (1974) shame dynamics, this research identifies culturally specific psychological patterns that primary studies may have overlooked.
Results: Across both studies, findings demonstrate that while dyslexic children may not show elevated global anxiety, they exhibit significantly lower self-esteem and educational confidence ($p < 0.05$). Correspondingly, mothers report heightened stress, social isolation and negative attitude toward the child's future ($p<0.001$), identifying shame as an "autonomous affect" that persists within the family unit.
Conclusions: To translate these data-driven insights into improved psychosocial care, a tri-pillar technological framework is proposed: (1) Restorative Gamification to validate effort and prevent early shame-based associations; (2) Private Literacy Tools to bypass the fear of public exposure during learning; and (3) Digital Support Platforms to help mothers reverse internalised shame through peer validation. By providing mastery-based engagement, these interventions offer a scalable pathway to mitigate psychological trauma and foster "self-affirming identities" in the Sri Lankan psychosocial care landscape.
Key words: Dyslexia, Sri Lanka, Shame-Trauma Cycle, self-esteem, Technological Framework, Thematic Synthesis

A27: WHEN ONE DIAGNOSIS ISN'T ENOUGH: PVNS WITH HIDDEN INFLAMMATORY ARTHRITIS
Authors: Saumya D. RUPASINGHE (Speciality Doctor), Robert Jones and Agnes Hunt *Orthopaedic Hospital – NHS, Oswestry*, Roshan Amarasena
Background: Pigmented villonodular synovitis (PVNS), currently known as Tenosynovial giant cell tumours, is a rare but benign and locally aggressive synovial proliferative disorder that typically presents as a chronic monoarthritis. It can closely mimic inflammatory arthritis (IA) clinically and radiologically, particularly in early or atypical presentations. Distinguishing PVNS from IA is challenging and crucial, as management strategies and long-term outcomes differ

significantly. The coexistence of PVNS with seronegative IA is uncommon and poses a considerable diagnostic challenge.

Case presentation: We report the case of a 60-year-old Caucasian woman who initially presented with intermittent inflammatory-type large joint pain involving the ankles, elbows, and knees. Her symptoms began in 2014 with insidious onset swelling and pain of the left ankle. MRI demonstrated synovial proliferation with hemosiderin deposition in the posterior subtalar joint, consistent with PVNS, which was subsequently confirmed on histology following synovial biopsy. She underwent radiofrequency ablation of the swelling around left ankle with good local symptomatic control. Over subsequent years, the patient developed episodic inflammatory symptoms involving the elbows and knees, associated with prolonged morning stiffness. Imaging revealed recurrent synovitis, bicipital tenosynovitis, and bursitis. During her most recent presentation, MRI of the knee demonstrated a large effusion, distended semimembranosus bursa, and marked subchondral bone marrow oedema, raising suspicion of an underlying inflammatory process beyond isolated PVNS.

Investigations: Laboratory evaluation revealed elevated inflammatory markers, while rheumatoid factor, anti-cyclic citrullinated peptide antibodies, antinuclear antibodies, and complement levels were negative. Plain radiographs showed no erosive disease. Musculoskeletal ultrasound demonstrated active synovial proliferation with increased vascularity. Ultrasound-guided synovial biopsy from the elbow revealed non-specific chronic inflammatory changes with no evidence of neoplasia.

Management and outcome: Given the persistence of inflammatory symptoms, multi-joint involvement, and imaging-confirmed active synovitis despite negative serology, a diagnosis of seronegative inflammatory arthritis coexisting with prior PVNS was made. Management was guided by a multidisciplinary team involving rheumatology, radiology, and orthopaedics, and the patient was treated accordingly for IA.

Conclusion: This case highlights the importance of maintaining diagnostic vigilance in patients with chronic or recurrent mono- or oligoarthritic conditions, even when an initial diagnosis such as PVNS appears to explain early findings. Advanced imaging, particularly musculoskeletal ultrasound and MRI, may be more informative than serology alone in identifying active synovitis in seronegative IA. A holistic, longitudinal approach is essential to avoid diagnostic delay and prevent progressive joint damage.

A28: A GLOWING PUZZLE: POLYMYALGIA RHEUMATICA, MALIGNANCY MIMICRY OR DUAL PATHOLOGY?

Authors: Saumya D. RUPASINGHE (Speciality Doctor), Robert Jones and Agnes Hunt *Orthopaedic Hospital – NHS, Oswestry*), Roger Bucknall

Background: Polymyalgia rheumatica (PMR) and giant cell arteritis (GCA) frequently overlap in elderly patients. Persistent symptoms despite conventional therapy may signal refractory disease, paraneoplastic phenomena, or coexisting pathology. Positron emission tomography–computed tomography (PET-CT) can clarify disease activity and exclude malignancy.

Aim: To highlight the diagnostic and therapeutic challenges in steroid-dependent PMR with persistent inflammation, and the role of PET-CT in distinguishing disease activity from malignancy.

Case Presentation: An 82-year-old Caucasian female presented to rheumatology follow up with a history of GCA (2021) complicated by steroid-induced diabetes and osteoporosis who has been

treated for GCA- PMR complex since 2023 following her symptoms with bilateral shoulder and hip girdle pain, prolonged morning stiffness, small joint involvement, and functional limitation. Following her initial consultation, she has been started on DMARDS as steroid-sparing agents, and the conventional therapy with methotrexate and hydroxychloroquine was insufficient, given her symptoms tend to persist despite this treatment escalation. She remained steroid dependent with doses below 7mg, and CRP was markedly elevated (114 mg/L) and autoimmune serology was negative.

Given poor treatment response, malignancy screening was undertaken. PET-CT demonstrated increased fluorodeoxyglucose uptake in shoulders, sternoclavicular joints, and ischio-gluteal bursae, consistent with PMR, with no evidence of large vessel vasculitis or solid organ malignancy. However, the Contrast-enhanced CT revealed a 13 × 5 mm pancreatic neck lesion, likely an intraductal papillary mucinous neoplasm, with normal tumour markers, including CA19-9, CA-125, and Carcinoembryonic antigen.

Management: Management of this patient was focused on optimisation of conventional therapy and cautious glucocorticoid tapering. Multidisciplinary follow-up was arranged for both inflammatory disease activity and surveillance of the pancreatic lesion including MRI of the pancreas. The coexistence of the pancreatic lesion raised the possibility of paraneoplastic PMR or dual pathology, although causality remained uncertain.

Conclusion: This case illustrates the complexity of steroid-dependent PMR in elderly patients and highlights the role of PET-CT in confirming disease distribution and excluding malignancy. Persistent inflammation despite conventional therapy warrants careful evaluation for paraneoplastic processes or overlapping inflammatory disease.

A29: EVALUATING CLINICAL COMPLIANCE VS. PATIENT ATTENDANCE: A QUALITY IMPROVEMENT AUDIT OF 6–8 WEEK INFANT HEALTH CHECKS

Authors: Asela DISSANAYAKE (Academic Visitor, Speciality Registrar in Medical Administration *Elizabeth Street Surgery, Blackpool, United Kingdom.* Prasanna ANTHONY, Hasini DISSANAYAKE

Type of presentation: Audit

Background: The 6-8 week infant examination is a vital clinical intervention for the early detection of congenital anomalies and developmental issues. Incomplete examinations or non-attendance pose significant risks for delayed diagnosis and long-term health complications.

Objectives: To assess the completeness of the 6–8 week infant examination at Elizabeth Street Surgery, Blackpool, against national standards requiring 100% documentation of five mandatory components: red reflex, cardiac auscultation, hip stability, external genitalia, and anal inspection.

Methodology: A retrospective clinical audit was conducted using EMIS electronic records for 46 expected infant attendees between January 15 and January 29, 2026. Data were analysed for attendance rates and compliance with the five mandatory clinical examination components.

Results: Of the 46 expected infants, only 29 (63%) had active records available. Among these active patients, 23 (79.3%) attended the clinic. The audit found 100% compliance with all mandatory examination components for every infant who attended the clinic (n=23). However, the overall population-level coverage was only 50% (23/46) due to high rates of non-attendance and missing records.

Conclusion: Clinical practice at the surgery is excellent; once an infant is seen, the examination is comprehensive and meets all safety standards. The primary gap is a systemic failure in clinic

attendance and population coverage. Recommendations include implementing a structured appointment reminder system, integrating a digital examination checklist into EMIS, and enhancing parental education to bridge the gap between eligibility and attendance.
Keywords: 6–8 Week Infant Examination, Clinical Audit, Primary Care, Neonatal Screening, Service Coverage

A30: TO WHAT EXTENT SHOULD LIPOPROTEIN(A) BE INTRODUCED AS A ROUTINE TEST FOR CARDIOVASCULAR RISK PREDICTION IN THE NHS?
Authors: Himaya SENADHIPATHY (Student Year 12), *Northampton High School*
Summary: Cardiovascular disease (CVD) remains the second leading cause of morbidity and mortality in the United Kingdom, with risk prediction currently guided by tools such as QRISK3. However, these models may underestimate risk in genetically predisposed individuals, needing additional biomarkers such as Lipoprotein(a) [Lp(a)]. This study critically reviews current evidence to assess the potential role of Lp(a) in routine NHS screening for primary prevention of CVD.
A critical review of the literature was conducted, including large-scale prospective studies and genetic analyses. Evidence from cohorts such as the UK Biobank demonstrates that Lp(a) is an independent, genetically determined risk factor with a continuous, log-linear association with CVD outcomes. Elevated Lp(a) levels are associated with a significantly increased risk of coronary heart disease, stroke, and aortic stenosis, even after adjustment for traditional risk factors. Genetic studies further suggest a causal relationship.
Despite this, the clinical utility of routine Lp(a) testing remains uncertain. While it may enhance risk stratification, there is currently limited evidence that its use leads to improved clinical outcomes. From a health economics perspective, although individual test costs are relatively low, widespread screening may result in substantial downstream costs due to increased monitoring and treatment.
Conclusion: Lp(a) demonstrates strong biological and epidemiological validity as a CVS risk marker. However, current evidence does not support its implementation as a routine population-level screening tool within the NHS. A targeted testing approach in selected high-risk groups may represent a more clinically appropriate and cost-effective strategy, pending further evidence from ongoing therapeutic trials.

A33: AUDIT OF HISTOLOGICAL GRADING IN INVASIVE BREAST CARCINOMAS: A COMPARATIVE ANALYSIS OF SCREENING-DETECTED AND SYMPTOMATIC CASES AT A UK TERTIARY CENTRE
Authors: Hansavika MADDUMAGE (Speciality doctor in Histopathology), *Frimley Park Hospital, Frimley, Camberley***.** Asela DISSANAYAKE, Amila GAMAGE, DI PALMA Silvana
Type of presentation: Audit
Objectives: The primary objective was to assess the distribution of histological grades in invasive breast carcinomas diagnosed on core biopsies at the Jarvis Breast Screening Centre and Royal Surrey Hospital (RSH-NHS-FT) over a 1-year period. The study aimed to compare these findings against UK National Health Service (NHS) standards and evaluate the differences in grading between screening-detected and clinically symptomatic cases**.**
Methodology: A retrospective review was conducted on 606 invasive breast carcinomas from 574 patients diagnosed between June 2021 and May 2022. Tumours were graded using the Nottingham Grading System (GS). Data was analysed using descriptive statistics and compared

with the 2020/21 NHS Breast Screening Programme and the Association of Breast Surgery national standards.

Results: The cohort comprised 362 (60%) screening-detected and 244 (40%) symptomatic cases. The mean age at diagnosis was 62 years. Overall, Grade 2 was most prevalent (59%). Notably, screening-detected cases showed a higher proportion of Grade 1 tumours (29%) compared to symptomatic cases (12%), while Grade 3 tumours were more frequent in the symptomatic group (27% vs. 13.5%). Compared to national standards (Grade 1: 24%; Grade 2: 56%; Grade 3: 19%), the audit revealed a slightly higher percentage of low-to-intermediate grade tumours in the screening group (Grade 1: 29%; Grade 2: 57.5%; Grade 3: 13.5%).

Conclusion: The distribution of histological grades at RSH-NHS-FT aligns closely with regional and national benchmarks. The findings reinforce the importance of the Nottingham Grading System in clinical practice. Recommendations include a re-audit in 12 months and seeking consensus opinions for marginal cases to ensure continued diagnostic accuracy and reproducible reporting**.**

Keywords: Breast Carcinoma, Histological Grading, Nottingham System, Clinical Audit, Breast Screening.

A34: A MODULAR R-BASED ANALYTICAL PIPELINE FOR COMPARING LYMPH NODE RATIO AND N-STAGE IN NODE-POSITIVE COLORECTAL CANCER

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Background: The prognostic adequacy of conventional pathological nodal staging (N-stage) in node-positive colorectal cancer is limited by its inability to account for variability in lymph node yield. The lymph node ratio (LNR), defined as the proportion of metastatic to examined lymph nodes, has emerged as a potentially superior metric. We developed a fully reproducible, modular R-based analytical pipeline to rigorously compare the prognostic performance of N-stage and LNR across multiple statistical dimensions. This plug-and-play framework requires only dataset substitution, with all analyses automated.

A pre-specified end-to-end workflow was implemented in R, integrating data preprocessing, survival modelling, validation, and clinical utility assessment. The pipeline comprises ten modular components, including cohort derivation, descriptive analysis, Kaplan–Meier estimation, Cox proportional hazards modelling, restricted cubic spline (RCS) analysis, competing risks regression (Fine–Gray), reclassification, and bootstrap-based internal validation. LNR was evaluated as both continuous and categorical (Rosenberg thresholds), with sensitivity analyses across alternative cut-points and lymph node yield thresholds. Model comparison followed a structured framework (unadjusted, TLE-adjusted, fully adjusted), incorporating key covariates. Discrimination (Uno's C-statistic), calibration, and decision curve analysis (DCA) were used to assess performance. Missing data handling included complete-case analysis with multiple imputation (MICE).

The pipeline enables robust comparative inference by integrating traditional and advanced survival methods. LNR demonstrated superior flexibility via RCS, capturing non-linear effects and improving discrimination, reclassification, and net benefit. Findings support LNR as a clinically informative alternative to N-stage within a scalable, transferable analytic framework.

A35: THE PREVALENCE AND CORRELATES OF DEPRESSION IN CHRONIC-KIDNEY-DISEASE (CKD) WITH PREVALENCE COMPARISON TO PATIENTS ATTENDING THE OUT-PATIENT DEPARTMENT (OPD) AT TEACHING HOSPITAL ANURADHAPURA

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Background: The prevalence of CKD is high in the North-Central province of Sri Lanka. Comorbid depression in patients with CKD may negatively affect the ability to cope with the illness, compliance to treatment and quality of life. Therefore, it is important to understand the prevalence and correlates of depression when planning services for patients with CKD.

Methods: This is a cross-sectional analytical study. A systematic random sampling method was used to recruit consented patients from the nephrology clinic and OPD. Calculated sample size was 212. A similar number of age and sex matched patients attending the OPD who didn't have the diagnosis of CKD were selected as a prevalence comparison. Patients were screened for depression with PHQ-9 and screened positive patients were clinically assessed with ICD-10 diagnosis criteria for depression. Binary logistic regression method was used to identify the risk factors for depression.

Results: Of 436 interviewees 213 were patients with CKD and 223 were OPD patients. The prevalence of depression in CKD and OPD patients were 20.2%(95%CI=15.0%-26.2%) and 11.2%(95%CI=7.4%-16.1%) respectively. The difference remained significant after correction for confounding variables (P=0.004,OR=0.410,95%CI=0.222-0.756). Binary logistic regression of CKD patients showed family history of mental illness and undergoing dialysis are independent risk factors (P=0.003,OR=0.103,95%CI=0.023-0.470 and P=0.004,OR=0.265,95%CI=0.107-0.656 respectively) for depressive disorder in patients with CKD.

Conclusions: Prevalence of depression in CKD patients was significantly higher compared to patients without CKD. Patients undergoing dialysis are at a higher risk of developing depressive disorder. Hence, it is important to screen patients with CKD for depression and integrate mental health services into the nephrology services.

A36: LYMPH NODE RATIO VERSUS AJCC 8TH EDITION N-STAGE FOR PROGNOSTIC STRATIFICATION IN NODE-POSITIVE COLORECTAL CANCER: A RETROSPECTIVE COHORT STUDY

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Introduction: The AJCC 8th edition N-stage classification for colorectal cancer (CRC) relies solely on the count of positive lymph nodes, limiting its prognostic accuracy by ignoring the total lymph nodes examined (TLE). The lymph node ratio (LNR) incorporates TLE, potentially correcting for harvest inadequacy. This study evaluated whether LNR provides superior prognostic discrimination for overall survival (OS) compared to N-stage, and whether it retains independent prognostic value after adjustment for TLE and other clinicopathologic covariates.

A retrospective cohort study was conducted on adult patients with histologically confirmed node-positive colorectal adenocarcinoma who underwent curative-intent surgical resection at Colombo North Teaching Hospital, Ragama, from January 2013 to 2019 and followed up since then. OS was evaluated using Kaplan-Meier methods and unadjusted Cox proportional hazards

models. Model discrimination was quantified using Uno's C-statistic. To prevent overfitting, a pre-specified event-count gating framework was applied, requiring ≥80 events for multivariable adjustment.

The final analytic cohort comprised 62 node-positive patients. Over a median follow-up of 2.9 years (1058 days), 34 OS events occurred. Inadequate nodal harvest (TLE <12) was observed in 25.8% of patients. In unadjusted Cox regression, N-stage (N2 vs. N1) was significantly associated with worse OS (Hazard Ratio [HR] 1.97, 95% CI 1.00–3.89; p=0.0496). Conversely, continuous LNR was not significantly associated with OS (HR 1.41, 95% CI 0.55–3.63; p=0.473). For prognostic discrimination, LNR showed slightly higher C-statistic (0.4667 vs. 0.4248; ΔC 0.0419) with overlapping confidence intervals and modest performance. LNR reclassified 58.1% of patients. Limited events (n=34) precluded multivariable adjustment, requiring validation studies.

A37: A SYSTEMATIC REVIEW COMPARING SUSCEPTIBILITY AND SEVERITY OF VITAMIN D DEFICIENCY INDUCED DILATED CARDIOMYOPATHY BETWEEN BLACK AFRICAN AND SOUTH ASIAN PAEDIATRIC PATIENTS, WITH AN INTEGRATED REVIEW TO EVALUATE POINT OF CARE VITAMIN D TESTING IN PREGNANT WOMEN

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Type of presentation: Literature review

Introduction: Dilated Cardiomyopathy (DCM) is the third leading cause of heart failure in children. Vitamin D deficiency (VDD) is an under-researched but reversible aetiology, if untreated, it may cause mortality. Maternal VDD is linked to low neonatal vitamin D store, yet supplementation uptake in pregnancy remains poor.

Aims/Objectives: We aimed to expand knowledge about VDD-induced DCM in children of these ethnicities, to assess the appropriateness of grouping them in research, and facilitate earlier diagnosis and improved outcomes. We further evaluated lateral flow assay (LFA) based point-of-care vitamin D testing for potential application in high-risk pregnant women.

Methodology: Following systematic database searches conducted on 19/10/2022, left ventricular ejection fractions (LVEF), compared with 25-hydroxyvitamin-D (25OHD) and total serum calcium, were recorded for under-18-year-old Black African and South Asian VDD-induced DCM patients. Discrepancies in clinical presentations between ethnic groups were investigated. Study characteristics were conveyed with a table, scatter graphs and narrative synthesis. A further search up to 20/03/2026, examined LFA testing.

Results: Thirteen studies (31 patients) were included. Black African patients showed higher LVEF than South Asians, despite similar 25OHD and calcium ranges. Twenty-four patients developed heart failure; three South Asian patients died. LFAs with smartphone-controlled technology offered semiquantitative results of ~90% accuracy. A screening tool identified 92% of deficient pregnant women.

Conclusion: Paediatric South Asians may be susceptible to greater morbidity, though evidence is poorly generalisable. Ethnic grouping should be reconsidered. Higher clinical suspicion could prevent deterioration. Utilising rapid, low-cost testing alongside screening tools identifying high-risk maternity patients could reduce neonatal VDD.


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