SLCEP
Sri Lanka College of Emergency Physicians

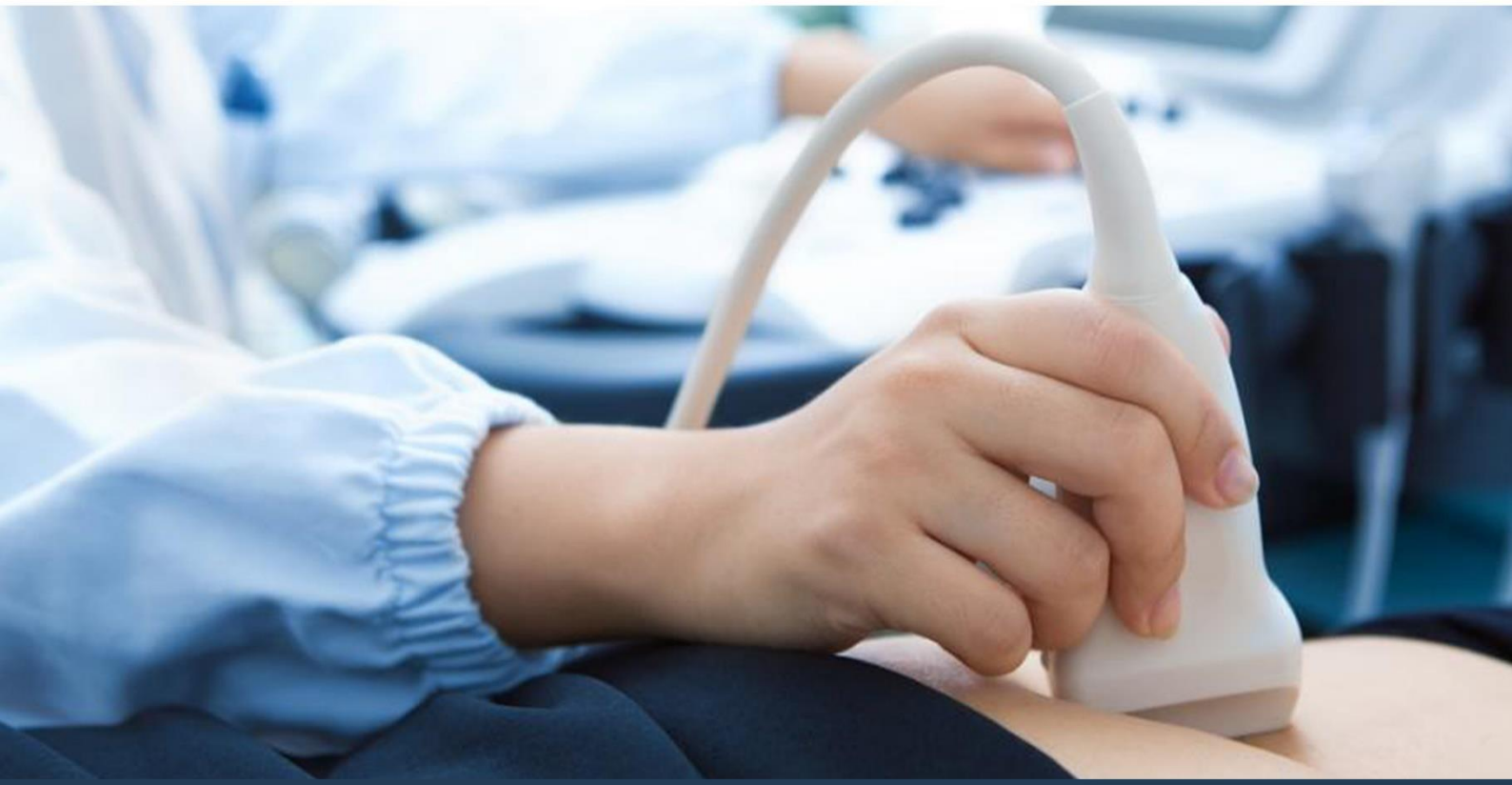
icEM POCUS 2023

Inaugural International Conference on

# EMERGENCY POINT OF CARE ULTRASOUND SRI LANKA

# icEM POCUS

*Waves that save lives*



2nd December 2023 at Bandaranaike Memorial International Hall, Colombo

SLCEP
Sri Lanka College of Emergency Physicians

EM POCUS
EMERGENCY POINT-OF-CARE ULTRASOUND ACADEMY

Content Endorsed By
American College of Emergency Physicians®

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சுகாதார அமைச்சு
Ministry of Health

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# Contents

# Message from the President – Sri Lanka College of Emergency Physicians

Congratulations on the successful organization of the Inaugural International Conference on Emergency POCUS (icEM POCUS 2023) by the ultrasound chapter of the Sri Lanka College of Emergency Physicians (SLCEP). The field of Emergency Medicine has demonstrated remarkable growth within a decade, with the unwavering effort of consultant emergency physicians making significant contributions to the emergency care system. As a college, SLCEP has successfully implemented pioneering projects that have had a positive and transformative effect on the healthcare system within the country. These initiatives reflect the college's commitment to innovation and its proactive role in contributing to advancements in healthcare. The tangible outcomes of these projects are evident in the improved quality and efficiency of healthcare services, marking SLCEP as a key player in shaping and enhancing the overall health landscape of the nation.

The emergence of Point-of-Care Ultrasound (POCUS) stands as a notable milestone within the medical community. Its significance has grown substantially, particularly in emergency and time-critical situations, a trend accentuated by the establishment and evolution of the field of Emergency Medicine. POCUS has proven invaluable in swiftly providing critical diagnostic information, contributing to more effective and timely medical interventions. This technological advancement exemplifies the continuous progress within the medical fraternity, enhancing diagnostic capabilities and improving patient outcomes, particularly in urgent care scenarios.

I would like to extend my sincere gratitude to the Honorable Minister of Health Services, the Secretary, the Director-General, and all esteemed officials within the Ministry of Health, Sri Lanka. Your dedicated leadership and tireless efforts are instrumental in steering our healthcare system toward excellence. Thank you for your unwavering commitment to establishing the field of emergency medicine and your invaluable contributions to the well-being of the nation.

Congratulations once again on this milestone and may the learnings from icEM POCUS 2023 continue to elevate emergency care standards.

**Dr. Nandana K. Jayathilake**
President- SLCEP

# Message from the Chair of Ultrasound Chapter – SLCEP/ icEM POCUS 2023 Conference

It is with great pleasure that I welcome you all to this historic occasion of the Inaugural International Conference on Emergency Point of Care Ultrasound, hosting more than 500 delegates including medical professionals, experts and sponsors from more than 10 countries physically and virtually.

Point-of-care ultrasound has revolutionized the practice of medicine, influencing how care is provided in nearly every specialty and the technologic miniaturization of ultrasound devices has outpaced integration of these devices into clinical practice. In the 1960s, scanning a patient and instantly diagnosing disease was only possible on Star Trek and now, 60 years later, POCUS provides that opportunity every day. POCUS enables clinicians to digitally peel back skin and observe the ecosystem of internal organs functioning in real-time.

Many professional societies and national organizations have recognized the potent impact of POCUS and have endorsed its routine use in clinical practice. As the Ultrasound Chapter of Sri Lanka College of Emergency Physicians, with the establishment of accredited training on Emergency Sonography we are committed to train and credentialing doctors in emergency and critical care settings island wide and under the theme of “Waves that save lives”, icEM POCUS conference will feature the latest in POCUS go beyond entry-level to the next level including how AI applicable to emergency settings.

We believe improving system and structure to make tasks as streamlined as possible through advanced technology like POCUS could greatly refine the future of healthcare.

**Dr. Madurangi Ariyasinghe**

Chair-Ultrasound Chapter and Scientific Secretary –SLCEP/ icEM POCUS 2023

## The Message from the Chief Guest – Secretary, Ministry of Health

I convey my heartiest congratulations to the Ultrasound Chapter of the College of Emergency Physicians on this momentous occasion of their inaugural international conference on emergency point-of-care ultrasound in Sri Lanka and thank the organizers for giving me the privilege of being the Chief Guest.

Point-Of-Care ultrasound (POCUS) has emerged as a safe and effective imaging modality, showcasing a rapidly expanding range of applications and advancements in medical technology. Conferences of this nature would lead to sharing of new knowledge, enhance existing skills and networking for shaping policy and future directions to reorient health services in the country. This a timely discussion as Sri Lanka looks to explore innovative ways to recover from the ongoing economic crisis which has posed unprecedented challenges to health care delivery.

The Ministry of Health has long given high priority to accident and emergency care. The National Health Policy 2016-2025 has identified ensuring delivery of comprehensive accident and emergency services at all levels of Health care as a main strategy. The accident and emergency policy in Sri Lanka was launched during my tenure as the Director General of Health Services. It provides guidance to establish a comprehensive accident and emergency care system in all levels of hospitals in the country. Against this backdrop, the Sri Lanka College of Emergency Physicians plays a pivotal role in supporting the implementation of the policy. Through its initiatives, the college can actively contribute to the effective execution of the policy, ensuring that it aligns seamlessly with the evolving landscape of emergency medicine.

The Ministry of Health supports innovative applications and professional development that can elevate the quality of healthcare delivery. I am pleased to witness the continued growth and exploration of new facets in emergency care. The conference reflects the commitment to raising standards and achieving international benchmarks in healthcare delivery.

I wish you all the very best for fruitful deliberations at the conference as we work together to streamline emergency care, fostering a healthcare system that prioritizes excellence and responsiveness.

Thank you.
**Dr. P.G. Mahipala**
**Secretary – Ministry of Health**

## Message from the Deputy Director General of Health Services

I express my heartiest congratulations to the Inaugural International Conference on Emergency POCUS (icEM POCUS 2023) organized by the ultrasound chapter of SLCEP. Emergency Medicine is unique in its multi-disciplinary commitment with one common purpose- to save, act fast and effectively during the golden hours of potential survival. Within 10 years of establishing as a specialty, the impact from these young clinicians to emergency care system is truly admirable and in collaboration with Ministry of Health, they were able to implement many ground breaking projects for the betterment of the health care system.

Point- of- care ultrasound is a recent advancement in medical history and we see increased utility of its in emergency settings with the establishment of Emergency Medicine more than ever. POCUS is quick, focused, cost effective modality and now it goes beyond simple diagnosis of free fluid in trauma or in dengue. As the Education, Training and Research unit (ET&R), we identified the value of establishing the emergency sonography to improve the quality of emergency care and collaboration with the Ultrasound Chapter of SLCEP in training all medical doctors in primary care level island wide will be one of most successful and sustainable projects done by our unit. With the prime purpose of improving quality patient care services with safety and dignity, Ministry of Health is always committing towards supporting to develop infrastructure and the workforce and I wish that these innovative, capable and committed specialists in Emergency Medicine will achieve the best of best nationally and internationally in the field of emergency sonography to strengthen the health service in Sri Lanka.

**Dr. Samiddhi Samarakoon**
**Deputy Director General (ET & R) / Director – Non Communicable Disease Unit,**
**Ministry of Health,**

# Message from the President of International Federation of Emergency Medicine (IFEM)

On behalf of the International Federation for Emergency Medicine, it gives me immense pleasure to extend the warmest wishes to the inaugural Emergency Point-of-care Ultrasound International Conference of Sri Lanka, 2nd of December 2023.

We wish and support Emergency Medicine in Sri Lanka, which has gone through a period many challenges since its early establishment stages, including the COVID-19 Pandemic and the economic crisis. Times of trouble often create the environment to discover new inventions, paths, and solutions. The Sri Lanka College of Emergency Physicians has risen to the challenge.

I was delighted to hear how the Emergency Units in Sri Lanka utilized Emergency Point-of-care Ultrasound recently. Amidst the crisis in the country, EM POCUS replaced the other investigations that were lacking during the crisis period and successfully saved the lives of the Accident and Emergency units' patients. This has demonstrated the importance of expanding the knowledge and skills, instructing, teaching, and training to provide better Emergency Care.

I congratulate the ultrasound chapter of SLCEP for their efforts to train the Emergency trainees and the medical officers covering the entire country with the assistance of the Ministry of Health, Sri Lanka, regardless of the limited existing manpower. These developments will also enhance the non-technical skills of leadership, organization, teamwork, and presentation skills, and will also enhance international exchanges and relationships.

Enjoy your conference and keep up the good work!

**Dr Ffion Davies**
**President,**
**International Federation for Emergency Medicine**
**17th November 2023**

# Message from the Asian Society for Emergency Medicine

On behalf of the Asian Society for Emergency Medicine, it is with great pleasure that I extend my warm regards to all organizers and participants on the occasion of the inaugural International Conference on Emergency Point of Care Ultrasound (icEM POCUS) of the Sri Lanka College of Emergency Physicians. I am impressed by the dedication of your team in organizing this conference, and I look forward to contributing to the enriching experience for all participants.

As we gather to explore advancements in emergency medicine, your conference holds immense significance especially during this trying times. Your commitment to advancing the field of emergency medicine is truly commendable. This platform provides a unique opportunity for us to share knowledge, foster collaboration, and strengthen our collective impact on emergency healthcare.

I look forward to active engagement, insightful discussions, and fruitful networking during the conference. Let us collectively contribute to the growth and development of emergency medicine in Asia.

I am confident that the icEM POCUS conference will be a resounding success. Congratulations and I wish you and all the participants a rewarding experience at the icEM POCUS conference.

Best regards,

**Pauline F. Convocar, MD, FPCEM**

**President**

## Message from the American College of Emergency Physicians (ACEP)

On behalf of the American College of Emergency Physicians (ACEP) and the ACEP International Emergency Medicine Section, I am pleased to inform you that your request icEM POCUS- International Conference on Emergency Point-of-Care Ultrasound hosted by the Sri Lanka College of Emergency Physicians to be officially endorsed by the American College of Emergency Physicians (ACEP) has been approved.

With this approval, you are authorized to feature the College's logo, in one of its approved forms, in your promotions as well as state in your promotions that "This conference is endorsed by the American College of Emergency Physicians."

We do ask that, as soon as possible after the conference, you provide a follow-up evaluation report and send it to my attention at mpillman@acep.org. We would also welcome submission of a post-conference article for our International Emergency Medicine Section newsletter.

The conference will be listed in the College's online Master Calendar as well as on the Calendar of International Conferences page of the International Emergency Medicine Web Section site.

Best wishes to you for undertaking icEM POCUS- International Conference on Emergency Point-of-Care Ultrasound at Bandaranaike Memorial International Conference Hall, Colombo, Sri Lanka on December 2, 2023. We hope that the conference will be a tremendous success.

Sincerely,

**Mollie Pillman, MS, MBA, CAE**

**Senior Vice President, Member Engagement**

## Message from the Australasian Society for Ultrasound in Medicine (ASUM)

On behalf of the Australasian Society for Ultrasound in Medicine (ASUM) we extend our warmest wishes as you prepare for the upcoming International Conference on Emergency Point-of-care Ultrasound (icEM POCUS 2023 scheduled to take place in December 2023 in Colombo.

Conferences like these offer a unique opportunity to connect with fellow professionals, exchange ideas, and explore the latest developments in the field of ultrasound. Your organisation, quality programme and speakers, enhances the skills and knowledge of so many specialists with a shared goal to improve the health outcomes for all.

ASUM acknowledges this conference and the commitment of organisers and delegates to remain at the forefront of advancements in the use of ultrasound within the specialty of Emergency Medicine.

Best wishes for a successful and fulfilling icEM POCUS 2023 conference.

Yours sincerely,

**Alison Deslandes**

**President**

**president@asum.com.au**

**Lyndal Macpherson**

**Chief Executive Officer**

**ceo@asum.com.au**

## Message from the Point of Care Ultrasound Certification Academy, USA

On behalf of Inteleos (POCUS Certification Academy), we would like to extend our warmest wishes for a successful and impactful icEM POCUS 2023 Conference. We appreciate the dedication and effort that you have put into organizing this conference, which certainly plays a vital role in advancing the field of POCUS. We hope that this conference brings together professionals and experts to share knowledge and experiences ultimately benefiting patient care and our healthcare as a whole.

May your icEM POCUS 2023 event be filled with enlightening discussions, insights, and fruitful collaborations. We look forward to continued growth and excellence in the POCUS community.

Best regards,

**Point of Care Ultrasound Certification Academy**

## Message for the Sri Lanka EM Society


This gives me immense pleasure to write for International Conference on Emergency Point of Care Ultrasound-Sri Lanka is being held on 2nd December 2023 Colombo.

I congratulates Dr Madhurangi Ariyasinghe, Dr Senitha Liyanage, Dr Nilanka Mudhitakumara, for organizing valuable conference on point of care ultrasound in emergency care, and I extend my best wishes to all the committee members, Emergency medicine society Sri Lanka & all the very best for the future endeavors.

***Dr Devendra Richhariya***

***INDIA***


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# icEM POCUS 2023 Organizing Committee

## Main Committee

### Co- Chairs

Dr. Madurangi Ariyasinghe (Scientific Secretary/Chair, Ultrasound Chapter-SLCEP)

Dr. Nilanka Mudithakumara (EM trainee)

### Co-Secretaries

Dr. Thanuja Darshani (General Secretary, SLCEP)

Dr. Shajani Udumullage (EM trainee)

### Co-Treasurers

Dr. Inuka Wijegunawardana (President-Elect, SLCEP)

Dr. Mithila Gamage (EM Trainee)

### Scientific Committee Co- chairs

Dr. Nandana Jayathilaka (President, SLCEP)

Dr. Dhammika Rathnayake (EM Trainee)

### Web Editors

Dr. Chulanga Wickramasinghe (Web Editor, SLCEP)

## Other Committee Members

Dr. Senitha Liyanage (Immediate Past President, SLCEP)

Dr. Duminda Herath (Executive Committee, SLCEP)

Dr. Rajeswaran Rajavarman (Executive Committee, SLCEP)

Dr. Dinesh Weerasinghe (Executive Committee, SLCEP)

Dr. Shashika Pieris (Member, SLCEP)

## Sub Committees

## Young Faculty Presentations Committee

Dr. Nandana Jayathilaka (President, SLCEP)

Dr. Achala Galliyadda (Senior Registrar, EM)

Dr. Gayani Nirmala (EM Trainee)

Dr. Nilanka Mudithakumara (EM Trainee)

## Finance & Sponsorships Committee

Dr. Madurangi Ariyasinghe (Scientific Secretary/Chair, Ultrasound Chapter-SLCEP)

Dr. Mithila Gamage (EM Trainee)

Dr. Asanka Saparamadu (EM Trainee)

Dr. Nilanka Mudithakumara (EM Trainee)

Dr. N. A. M. Rizwan (EM Trainee)

Dr. Piniru Perera (EM Trainee)

Dr. Erandi de Silva (EM Trainee)

Dr. Kaushika Ruwanpathirana (EM Trainee)

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Dr. Ayodhya Rajapakse (EM Trainee)

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Dr. Ishanka Premarathilake (EM Trainee)

Dr. Champika Udayangani (EM Trainee)

Dr. Asanka Saparamadu (EM Trainee)

Dr. Malshini Fonseka (EM Trainee)

Dr. Nuwani Egodayalage (EM Trainee)

Dr. Upul De Saram (EM Trainee)

Dr. Ayodhya Rajapakse (EM Trainee)

Dr. Prasangi Jayarathna (EM Trainee)

Dr. Kaushika Ruwanpathirana (EM Trainee)

Dr. Nipuna Prabath Bindusara (EM Trainee)

Dr. Lakmal Jayathilake (EM Trainee)

Dr. Sulakshana Rajapakse (EM Trainee)

Dr. Sriyani Herath (EM Trainee)

Dr. Erandi de Silva (EM Trainee)

Dr. Surenika Jayasundara (EM Trainee)

Dr. Chatura Anuruddha (EM Trainee)

Dr. Dulanga Atapattu (EM Trainee)

Dr. Damindi Wanniarachchi (EM Trainee)

Dr. Iresha Rathnayake (EM Trainee)

Dr. Mithila Gamage (EM Trainee)

Dr. Methmal Mallawarachchi (EM Trainee)

Dr. Mahendra Srinath Perera (EM Trainee)

## Compering

Dr. Piniru Perera (EM Trainee)

Dr. Suren Perera (EM Trainee)

Dr. Erandi de Silva (EM Trainee)

Dr. Shalini Senarathne (EM Trainee)

## Editorial Committee

Dr. Rajeswaran Rajavarman (Executive Committee, SLCEP)

Dr. Piniru Perera (EM Trainee)

Dr. Upul De Saram (EM Trainee)

Dr. Erandi de Silva (EM Trainee)

## Puzzle (Sono-quiz)

Dr. Nilanka Mudithakumara (EM Trainee)

Dr. Dhammika Rathnakaye (EM Trainee)

Dr. Malshini Fonseka (EM Trainee)

Dr. Nuwani Egodayalage (EM Trainee)

Dr. Shajani Udumullage (EM Trainee)

Dr. Asanka Saparamadu (EM Trainee)

## Technical and Media Committee

Dr. Chulanga Wickramasinghe (Web Editor, SLCEP)

Dr. Mendis Appu Prasath (Medical Officer, MOH)

Dr. Prabath Bindusara (EM Trainee)

Dr. Lakmal Jayathilake (EM Trainee)

Dr. Hansana Sewwandi (EM Trainee)

Dr. Shajani Udumullage (EM Trainee)

Dr. Nilanka Mudithakumara (EM Trainee)

## Registration / Invitations Committee

Dr. Dhammika Rathnakaye (EM Trainee)

Dr. Prasangi Jayarathna (EM Trainee)

Dr. Sriyani Herath (EM Trainee)

Dr. Surenika Jayasundara (EM Trainee)

Dr. Fathima Haseena (EM Trainee)

Dr. Ayodhya Rajapakse (EM Trainee)

Dr. Udayanthi Chandrasiri (EM Trainee)

Dr. Ishanka Premarathilake (EM Trainee)

Dr. Champika Udayangani (EM Trainee)

Dr. N. A. M. Rizwan (EM Trainee)

## Foreign Faculty-in-Charge Team

Dr. Nilanka Mudithakumara (EM Trainee)

Dr. Shajani Udumullage (EM Trainee)

Dr. Sulakshana Rajapakse (EM Trainee)

Dr. Methmal Mallawarachchi (EM Trainee)

Dr. Dulkifly Adamlebbe (EM Trainee)

Dr. Senaka Herath (EM Trainee)

Dr. Titus Sampath Atulugamage (EM Trainee)

## Pre & Post Conference Workshops Organizing Team

### EMPOCUS Workshop

Dr. Madurangi Ariyasinghe (Scientific Secretary/Chair, Ultrasound Chapter-SLCEP)

Dr. Asanka Saparamadu (EM Trainee)

Dr. Shajani Udumullage (EM Trainee)

Dr. Gayani Nirmala (EM Trainee)

Dr. Nilanka Mudithakumara (EM Trainee)

### TAPNA Workshop

Dr. Inuka Wijegunawardana (President-Elect, SLCEP)

Dr. Asanka Saparamadu (EM Trainee)

Dr. Malshini Fonseka (EM Trainee)

Dr. Nuwani Egodayalage (EM Trainee)

Dr. Saman Senadheera (EM Trainee)

## Pain Anaesthesia & Nerve Blocks Workshop

Dr. Madurangi Ariyasinghe (Scientific Secretary/Chair, Ultrasound Chapter-SLCEP)

Dr. Ashani Rathnayake (Consultant Anaesthetist)

Dr. Dhammika Rathnakaye (EM Trainee)

Dr. Mithila Gamage (EM Trainee)

## Paediatric Emergency Ultrasound Workshop

Dr. Madurangi Ariyasinghe (Scientific Secretary/Chair, Ultrasound Chapter-SLCEP)

Dr. Shashika Peiris (Consultant Emergency Physician)

Dr. Ishanka Premarathilake (EM Trainee)

Dr. Champika Udayangani (EM Trainee)

Dr. Nilanka Mudithakumara (EM Trainee)

## Dengue Ultrasound Workshop

Dr. Madurangi Ariyasinghe (Scientific Secretary/Chair, Ultrasound Chapter-SLCEP)

Dr. Inuka Wijegunawardana (President-Elect, SLCEP)

Dr. Shashika Peiris (Consultant Emergency Physician)

Dr. Chatura Anuruddha (EM Trainee)

Dr. Dulanga Atapattu (EM Trainee)

Dr. Damindi Wanniarachchi (EM Trainee)

## Musculo-skeletal Ultrasound Workshop

Dr. Thanuja Darshani (General Secretary, SLCEP)

Dr. Chanaka Vitharanage (Trainee, Sports Medicine)

Dr. Asanka Saparamadu (EM Trainee)

Dr. Mithila Gamage (EM Trainee)

# icEM 2023 Faculty

## International Faculty

**Dr. Adrian Goudie**

BMedSci (Hons)MBBS FACEM DipMedTox DDU

Emergency Physician

Fiona Stanley Hospital -Perth, Australia

Past Secretary/Vice President of WFUMB

Past President of ASUM

Past chair of DDU board and Ultrasound committee of ACEM

**Dr. Robyn Brady**

MBBS FRACP FACEM MRCPI CCPU

Staff Specialist Paediatric / Emergency Medicine

Ultrasound Lead Department of Emergency Medicine

Queensland Children's Hospital, Queensland

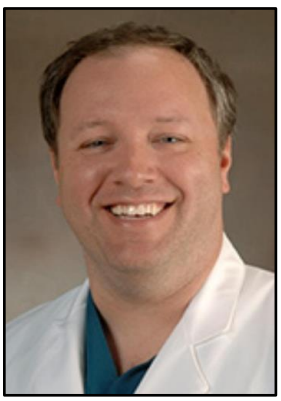
Lismore Base Hospital, NSW

**Dr. Elissa Kennedy-Smith**

MBBS FACEM CCPU DDU

Emergency Physician

Sandringham Hospital Emergency Department



**Professor Richard D Gordon**

MD

Professor, Department of Emergency Medicine,

McGovern medical school University of Texas, Houston, Texas

Fellowship Director- Ultrasound Education

Emergency Ultrasound Director McGovern Medical School, Houston, Texas

## Dr. Kuo-Chih Chen

MD
Attending physician of Taipei Medical University – Shuang Ho Hospital
Emergency Physician & Pain Interventional Sinologist
Former Chairman of Emergency Ultrasound Committee Taiwan Society of Emergency Medicine
Instructor and Course Director of WINFOCUS
Former Director, Society of Emergency & Critical Care Medicine, Taiwan

## Assistant Professor Romulo Babasa III

MD, FPCEM,
Assistant Professor of Emergency Medicine
St. Luke's Medical Central College of Medicine, Philippines
Fellow of the Philippines College of Emergency Medicine (PCEM)
Founding President, Philippine Society of Ultrasound in Resuscitation and Emergencies (PSURE)
Lecturer, University of Santo Tomas Faculty of Medicine and Surgery POCUS Institute
Head, Philippine College of Emergency Medicine POCUS Special Interest Group
Instructor of World Interactive Network Focused on Critical Ultrasound (WINFOCUS-Philippines)

## Dr. Nadi Pandithage

BMBS (Hons), FACEM, CCPU, DDU
Senior Emergency Physician
Chair, ACEM Emergency Department Ultrasound Committee
ACEM Examiner Board
Clinical Lead in Ultrasound
Royal Darwin Hospital
Palmerston Regional Hospital

## Dr. Shamsuriani MD Jamal

Consultant Emergency Physician
Deputy Head of Emergency Department at the University Kebangsaan Malaysia Medical Centre.
Council member of the College of Emergency Physicians
Council member of Academy of Medicine and Resuscitation Society, Malaysia
Member of Critical and Emergency Sonography, Malaysia
Point of care ultrasound course instructor

## Dr Gan Kiat Kee

MD, Master of Medicine (Emergency), University of Sains, Malaysia
Emergency Physician, Emergency and Trauma Department, Hospital Sultanah Aminah Johor Bahru, Malaysia
Adjunct Lecturer, School of Medicine and Health Sciences, Monash University, Malaysia
Member of Academy of Medicine Malaysia
Fellow of Emergency and Critical Care Ultrasound (WINFOCUS)
Certified Malaysia SUCCES point-of-care ultrasound provider

## Dr. Dinesh Sirisena

MRCGP(UK), Dip(SEM)(UK&I), PgD(MedUSS)(UK), MSc(SEM)(UK), MSc(Clinical Ed)(UK), FFSEM(Ire), FFSEM(UK&I), FAMS(Sports Med)(Sing.)
Consultant in Sports and Exercise Medicine, Singapore
Specialized in non-invasive injury treatments including Ultrasound guided injections, TENEX therapy and Shockwave therapy.
Assistant professor in both NUS Yong Loo Lin and NTU lee Kong Chian school of medicine in Singapore.

## Dr Udara Kularatne

MB BChir, BE, FRCR
Consultant Musculoskeletal Radiologist
University Hospital of North Midlands
UK

## Dr. Ankit B. Shah

MBBS, MD, DNB (radiodiagnosis)
Special interest in musculoskeletal radiology

## Sri Lankan Faculty

**Dr. W D Dilshan Priyankara**

MBBS MD (SL) FRCP (UK) EDIC
Consultant Intensivist
National Hospital of Sri Lanka

**Dr. Janaka Rajapaksha**
Consultant Radiologist

**Dr. Prakash Priyadarshan**

MBBS MD FCCP FRCP (Edin) FRCP (London)

Consultant Cardiologist

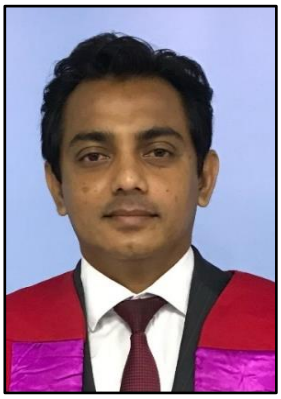
**Dr. Madurangi Ariyasinghe**
MBBS (SL) MD-EM(SL) MRCEM(UK) POCUS-ARDMS(USA)
Consultant Emergency Physician
Chair of Ultrasound Chapter- SLCEP

**Dr A G Thanuja Darshani**

MBBS (Col) MD (SL) MRCEM(UK) POCUS (ARDMS)

Consultant Emergency Physician

Sri Jayewardenepura General Hospital



**Dr. Nandana K Jayathilake**

MBBS. MD, Diploma in Emergency Sonography, Dip. In Disaster Management.

Consultant Emergency Physician NH Kandy

President Elect SLCEP

**Dr. Senitha Liyanage**

MBBS MD-EM MRCEM(UK) DCCM CCA DDM

Consultant Emergency Physician

President of Sri Lanka College of Emergency Physicians

Member of BOS (Emergency Medicine)

**Dr. Ananda Wijewickrama**

MBBS, MD, MRCP (UK), FCCP

Senior Consultant Physician at the Infectious Diseases Hospital (IDH), Colombo

Chairman of the National Medicines Regulatory Authority (NMRA)

Elect president of Sri Lanka Medical Association (SLMA).

# SLCEP Council 2023/2024

**Seated from right to left**

Dr Madurangi Ariyasinghe (Scientific Secretary)
Dr Inuka Wijegunawardana (President Elect)
Dr Senitha Liyanage (Immediate Past President)
Dr Nandana K Jayathilake (President)
Dr A G Thanuja Darshani (General Secretary)
Dr Kaminda Wijenayake (Treasurer)
Dr Harendra Hewapathirana (Assistant Secretary)

**Standing from right to left**

Dr Indika de Lanerolle (Executive Committee)
Dr Isuru Gayan (Executive Committee)
Dr Dushyantha Goonewardene (Editor)
Dr Sahan Fernando (Executive Committee)
Dr Chulanga Wickramasinghe (Web Editor)
Dr Jagath Wijayarathna (Assistant Treasurer)
Dr Dinesh Weerasinghe (Executive Committee)
Dr Nadaraja Prasanna (Executive Committee)
Dr Duminda Herath (Executive Committee)

**Absent**

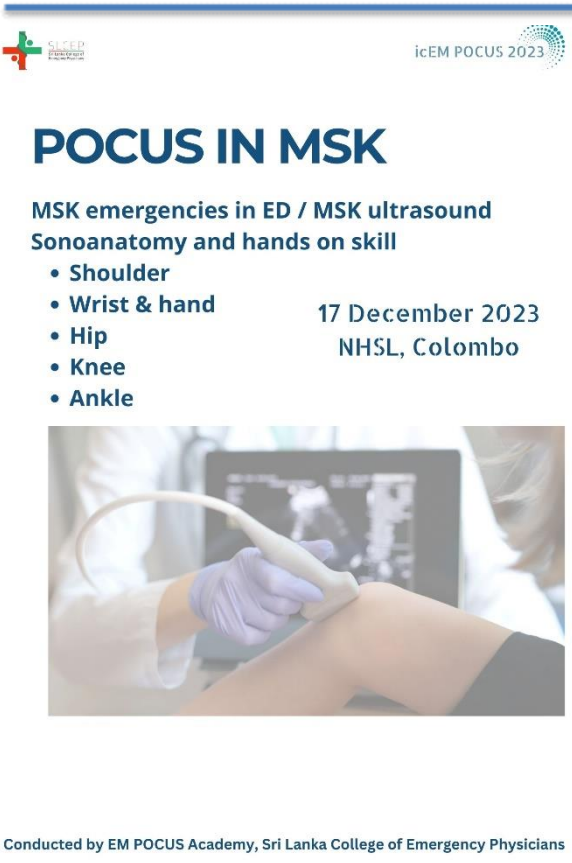
Dr R. Rajavarman (Executive Committee)

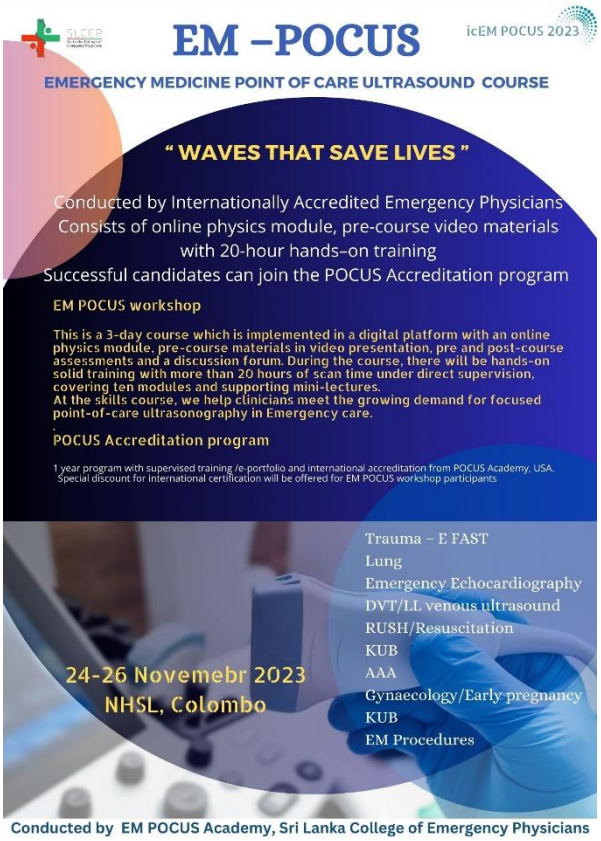
# Conference Program

| | |
|---|---|
| **7.30 -8.00 AM** | **Registration/Morning Tea** |
| **7.55AM** | Tourism video |
| **8.00 AM – 09.15 AM** | **Symposium 1- " Lub-dub into POCUS"**<br>• FATE protocol – Dr. Nandana Jayathilake (EMP - SL)<br>• POCUS in syncope- Dr. Prakash Priyadarshan (CC - SL)<br>• Paediatric heart - Dr. Robyn Brady (EMP - AUS)<br>Demonstration -" When the heart aches"<br>(RWMA in STEMI) by Dr. Julina Md Noor (EMP - MAL)<br><br>**CHAIR- Prof Aruna Munasinghe/Dr. Anidu Pathirana** |
| **9.15 AM-10.45 AM** | **Inauguration Ceremony**<br>• Welcome guests with traditional dancers<br>• lit oil lamp<br>• National anthem<br>• Narrator Speech/Theme video<br>• Welcome speech by Chair of Ultrasound Chapter, SLCEP<br>• Guest Speeches<br>• Launch website portal/faculty logo by Hon. Dr. Ramesh Pathirana<br><br>**Key note speech –** Dr. Adrian Goudie **(**Past President, ASUM, Australia) |
| **10.45 AM- 12.00 PM** | **Parallel sessions**<br><br>**Hall 1**<br>**Symposium 2- "Re-POCUS"**<br>• Volume resuscitation – recent trend: Dr. Thanuja Darshani (EMP - SL)<br>• Resuscitative USS – COACHRED & CASA protocols: Prof. Romulo Babasa (EMP - PHP)<br>• Acute lung – Dr. Kylie Baker (EMP - AUS)<br>Demonstration - "Pump the blood out"<br>(USS guided CO measurement) by Dr. Dilshan Priyankara (CI-SL)<br><br>**CHAIR- Prof Vasanti Pinto/ Dr. Pauline Convocar**<br><br>**Hall 2** |

| | |
|---|---|
| | **Young EM Forum**<br><br>**Judges- Prof Aruna Munasinghe/Dr. Nadi Pandithage/ Dr. Nandana Jayathilaka** |
| **12.00- 12.45 PM** | **Lunch** |
| **12.45 PM- 1.45 PM** | **Hall 1**<br>**Panel discussion - " Crossing the horizons "**<br>***Data privacy, Research in POCUS, AI in USS practice***<br>Moderator - Dr. Madurangi Ariyasinghe (SL)<br>Faculty-<br>Dr. Sandeep Gore (IND), Dr. Kuo-Chih Chen (Taiwan), Dr. Adrian Goudie (AUS), Prof. Shalik Farid (MAL), Prof. Romulo Babasa (PHP), Dr. Nadi Pandithage (AUS), Dr. Pauline Convocar (PHL), Dr. Senitha Liyanage (SL)<br><br>**Hall 2**<br>**Young EM Forum**<br><br>**Judges: Dr. Imron Subhan / Dr. Duminda Herath / Dr. Inuka Wijegunawardena** |
| **1.45 PM – 2.00 PM** | **Sono quiz (Moderators – EM trainees)** |
| **2.00 PM – 3.15 PM** | **Symposium 3- "Beyond the bruises**<br>• MSK and soft tissue trauma – Dr. Kuo-Chih Chen (EMP - Taiwan)<br>• Neck trauma – Dr. Janaka Rajapaksha (CR-SL)<br>• Pain anaesthesia at ED- Prof. Richard Gordon (EMP - USA)<br>Demonstration - " Numb the pain"<br>(A nerve block using low cost US phantom) by Dr. Kuo-Chih Chen (EMP - Taiwan)<br><br>**CHAIR – Prof Shalik Farid / Dr. Chulanga Wickramasinghe** |
| **3.15 PM – 3.30 PM** | **Evening Tea** |
| **3.30 PM – 4.45 PM** | **Symposium 4- "Without much ado "**<br>• Acute abdomen in elders – Dr. Adrian Goudie (EMP - AUS)<br>• Paediatric abdominal pain – Prof. Shalik Farid (EMP - MAL)<br>• Acute pelvic pain in women- Dr. Elissa Kennady (EMP - AUS)<br>Demonstration – "One step to theatre"<br>(locate Appendix) by Dr. Adrian Goudie (EMP - AUS)<br>**CHAIR – Prof Romulo Babasa/ Dr. Srilal De Silva** |
| **4.45 PM – 5.15 PM** | **Q & A session** Moderator – Dr. Rajeswaran Rajavarman (SL) / All faculty |
| **5.15 PM – 5.30 PM** | **Closing remarks** |

# Pre and Post Conference Workshops

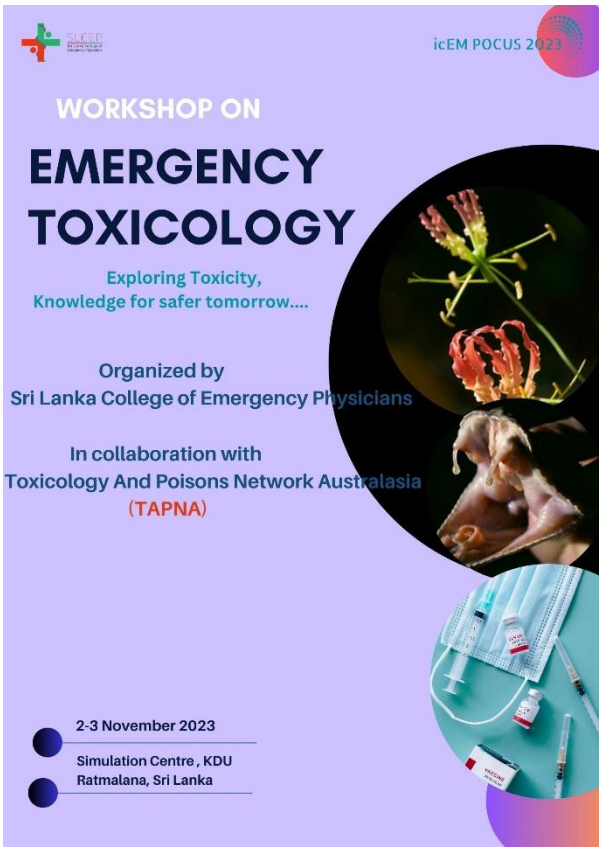




POCUS in Dengue
icEMPOCUS Post Congress Workshop
Venue- IDH Auditorium.
Date- 9th December 2023.
Time- 8 AM Onwards.
KEY POINTS...
Early detection of Dengue leaking
Dynamic Measurements of fluid
responsiveness Fluid overload detection
SLCEP
Sri Lanka College of Emergency Physicians
icEM POCUS 2023


icEM POCUS 2023
POCUS IN
PAIN MANAGEMENT
Pain management in ED
Troubleshooting of Regional Anesthesia
Lower Extremity
PENG block (hip & pelvic fracturs)
Distal Sciatic in popliteal fossa for ankle dislocation
Head & Neck Superficial cervical
Upper Extremity
Interscalene- shoulder dislocation
Supraclavicular brachial plexus- elbow/ wrist dislocations
Chest Serratus anterior plane
3 December 2023
NHSL, Colombo
Conducted by EM POCUS Academy, Sri Lanka College of Emergency Physicians


icEM POCUS 2023
WORKSHOP ON
EMERGENCY
TOXICOLOGY
Exploring Toxicity,
Knowledge for safer tomorrow....
Organized by
Sri Lanka College of Emergency Physicians
In collaboration with
Toxicology And Poisons Network Australasia
(TAPNA)
2-3 November 2023
Simulation Centre , KDU
Ratmalana, Sri Lanka

# Speakers at Workshops

**EM POCUS workshop**

1. Dr. Adrain Goudie (Australia)
2. Dr. Madurangi Ariyasinghe
3. Dr. Thanuja Darshani
4. Dr. Inuka Wijegunawardena
5. Dr. Duminda Herath
6. Dr. Shashika Pieris

**POCUS in Pain Management in ED**

1. Dr. Kuo-Chih Chen (Taiwan)
2. Dr. Gan Kiat Kee (Malaysia)
3. Dr. Ashani Rathnayaka
4. Dr. Poornima Ekanayaka
5. Dr. Roshana Mallawarachchi

**POCUS in PEM**

1. Ass Prof. Romuola Babasa 111 (Philippines)
2. Dr. Julina Md Noor (Malaysia)
3. Ass Prof. Shaik Farid (Malaysia)
4. Dr. Sandeep Gore (India)
5. Dr. Shamsuriani Md Jamal (Malaysia)
6. Dr. Shashika Pieris

**POCUS in Dengue**

1. Dr. Ananda Wijewickrama
2. Dr. Inuka Wijegunawardena
3. Dr. Shashika Pieris

**POCUS in MSK injuries**

1. Dr. Ankit B Shah (India)
2. Dr. Udara Kularatne (UK)
3. Dr. Dinesh Sirisena (Singapore)
4. Dr. Nadi Pandithage (Australia)
5. Dr. Claire Gorham (Australia)
6. Dr. Chanaka Vitharanage
7. Dr. Madurangi Ariyasinghe

# Keynote Speech

**Dr Adrian Goudie**
**BMedSci(Hons)MBBS FACEM DipMedTox DDU**
**Emergency Physician**
**Fiona Stanley Hospital -Perth, Australia**
**Past Secretary/Vice President of WFUMB**
**Past President of ASUM**
**Past chair of DDU board and Ultrasound committee of ACEM**

Portable ultrasound has been heralded as a disruptive technology for medical practitioners by rapidly allowing more accurate diagnosis, especially for many emergency conditions that are very difficult to diagnose clinically. Technological advances led to the first commercial portable machines over two decades ago, resulting in the first predictions that ultrasound would become an essential tool for all practitioners.

Despite ongoing improvements in technology, continually falling costs and the inclusion of ultrasound training requirements by many international emergency colleges, ultrasound use by most practitioners has remained much less than predicted.

This presentation will explore the history of portable emergency ultrasound and the reasons why the initial predictions did not eventuate, then describe some of the more recent advances which may result in a rapid increase in the uptake of this incredibly useful technology.

# How the waves originated

## History of Point-of-Care Ultrasound (POCUS) in Sri Lanka

In 2013, the inaugural batch of Emergency Medicine trainees marked the beginning of POCUS utilization. It wasn't until 2019 that the first Emergency Physicians emerged. Over the years, 10 batches, comprising 200 trainees and 20 consultants, have participated. Despite lacking formal emergency sonography training until 2022, every EM trainee incorporated POCUS into their practice, recognizing its value as a cost-effective tool that could significantly enhance emergency care quality.

Faced with two options, importing accredited POCUS courses or instructors at a considerable cost, or developing an in-house POCUS course tailored to the local system, the decision was made to pursue the latter. Opting to create a course aligned with global standards, several Emergency Physicians, accredited in Emergency Sonography during overseas training in the UK/Australia, conducted the introductory EM POCUS course from June 9-11, 2022, in Colombo. The 3-day course adheres to global standards, encompassing pre-course video materials, an online ultrasound physics module, discussion forums, and 20 hours of hands-on skills across 10 modules. Participants, selected from postgraduate trainees, consultants, and medical officers working in emergency and critical care settings, undergo a comprehensive training experience. Australian CCPU accredited Emergency Physicians are part of our faculty who immensely add a value to the course. Due to overwhelming demand, the EM POCUS course is now conducted every three months. Stepping further, the first internationally recognised accreditation pathway for emergency sonography was established in 2022 in collaboration with POCUS Academy, USA and currently around 15 trainees under supervised training with EM POCUS Academy.

## The founding instructors of the EM POCUS course

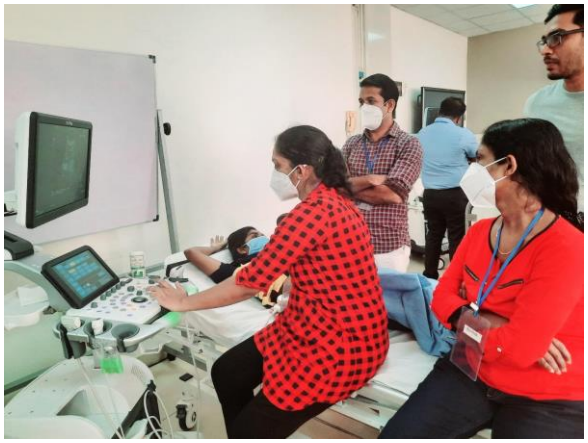

(Left to Right): Dr. Dilan Epasinghe, Dr. Harendra Cooray, Dr. S.K.A.D. Sanjeewa (Co-founder/Course Director/Supervisor for accreditation pathway/Sri Lankan Ambassador for POCUS Academy), Dr. Madurangi Ariyasinghe (Co-founder/Course Director/Supervisor for accreditation pathway/Founder and Chair of EM

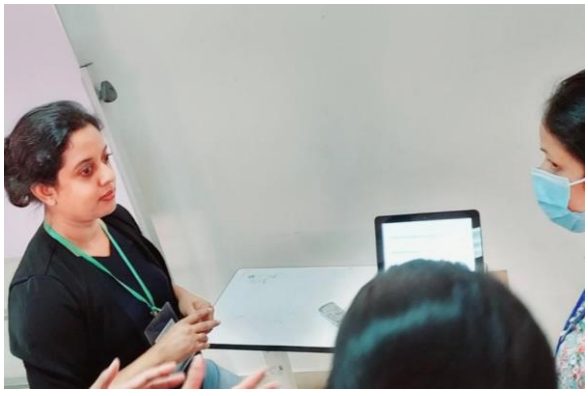
POCUS Academy), Dr. Bhaginda Gunawardena, Dr. Nuwan Warnakula, and Dr. Nandana Jayathilaka (President - SLCEP). Notably absent from the photo are Dr. Dushayantha Goonewardene, Dr. Bandara Ekanayake, Dr. Ganaja Samarajeewa, and Dr. T. Prasanth.

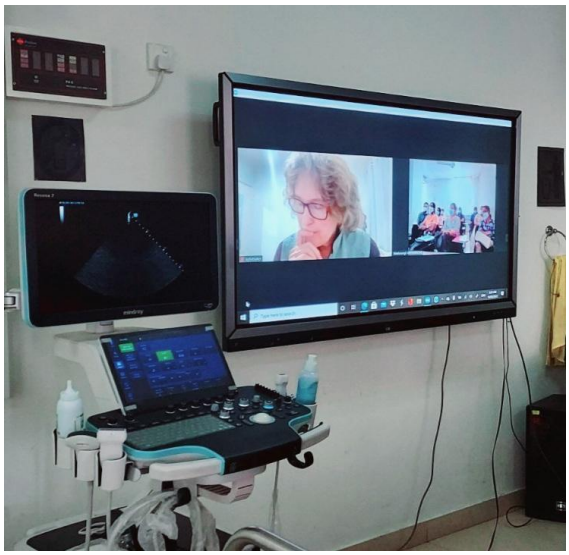
**First course – June 2022 in Colombo**



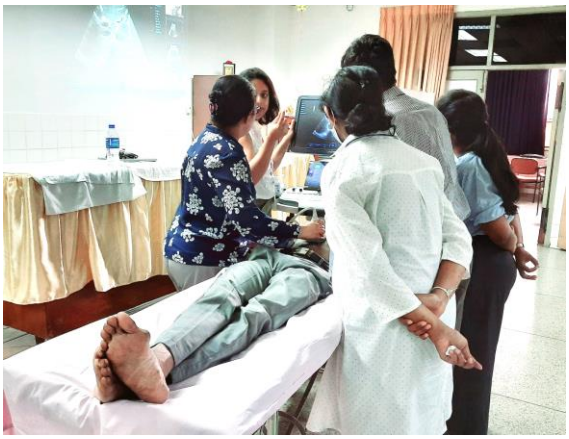




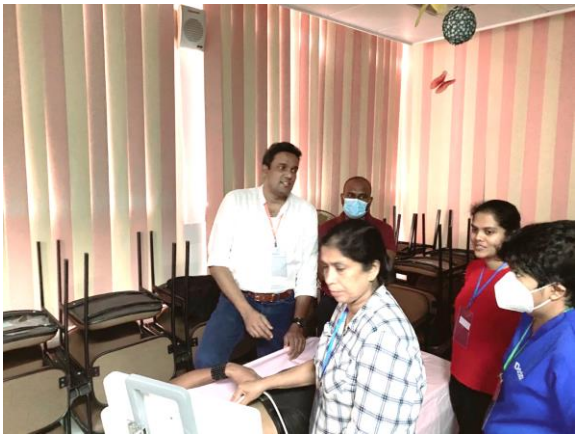


**Second course – December 2022, Colombo**









Recognizing the crucial need for well-trained doctors proficient in POCUS, in 2023, the EM POCUS Academy partnered with the Education, Training, and Research unit of the Ministry of Health, Sri Lanka. Together, they launched the first island-wide training program for medical officers at the primary care level, offering a one-day Basic POCUS and a two-day Advanced POCUS course.

**Third course – March 2023, Colombo**


InFocus

**Fourth course - June 2023, Kandy**

In addition, as the first step to accredit the Anaesthesiology trainees, the POCUS for Anaesthesiology, 2-day course was successfully started in Kandy and we were invited for more collaborations from other specialities near future.


In 2023, the Ultrasound chapter of the Sri Lanka College of Emergency Physicians (SLCEP) took a significant step by establishing the Emergency Medicine Point-of-Care Ultrasound (EM POCUS) Academy. This innovative initiative brings together Emergency Medicine Practitioners (EMPs) accredited in emergency sonography, overseas advisors, and trainee representatives. At the core of its activities, the EM POCUS Academy is administering an emergency sonography accreditation program. This program entails a local one-year supervised training period, coupled with an e-portfolio, and culminates in international accreditation from the POCUS Academy in the USA. Presently, close to 10 trainees are actively undergoing training for EM POCUS Accreditation.

Recognizing the vital need for well-trained doctors proficient in POCUS, the EM POCUS Academy, in collaboration with the Education, Training, and Research unit of the Ministry of Health, launched the inaugural island-wide training program in 2023. This program targets medical officers at the primary care level, offering a one-day Basic POCUS and a two-day Advanced POCUS course. This collaborative effort reflects the academy's commitment to extending the benefits of POCUS training across the healthcare landscape, emphasizing its importance in diverse medical settings.

## First Basic POCUS course for Medical Officers – July 2023, Kalutara

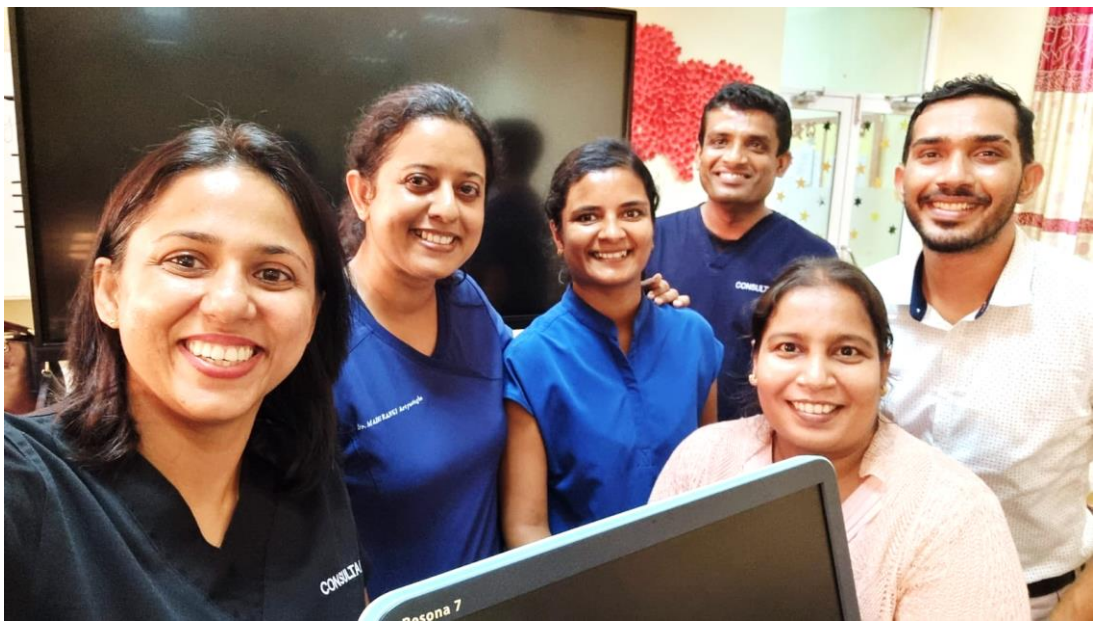












Stepping further, the first 2-day course for Anaesthesia and critical, POCUS for was held on June 2023 in Kandy.

**First POCUS for Anaesthesiology – June 2023, Kandy**

To garner increased recognition and emphasize the significance of staying abreast of the latest developments in Point-of-Care Ultrasound (POCUS) beyond conventional practices, we take great pride in announcing our inaugural conference on Emergency Point of Care Ultrasound, icEM POCUS. This ground-breaking event is scheduled to take place at the Bandaranayake Memorial International Conference Hall (BMICH) in Colombo on the 2nd of December 2023. The conference will feature the participation of global experts in the field, and attendees can benefit from five pre- and post-congress workshops covering emergency sonography in various specialized fields.

Our journey has been challenging, but the success we've achieved is a testament to the dedication and hard work of the members of the EM POCUS Academy. Our primary objective is to establish a standardized and updated emergency care system in Sri Lanka, with the vision of making the country a prominent training hub for emergency sonography in South Asia. We are diligently working towards this ambitious goal, driven by the commitment to elevate the standards of emergency care in the region.

## Ultrasound Faculty of Sri Lanka College of Emergency Physicians

### Chair

**Dr. Madurangi Ariyasinghe**

### Committee members

**Dr. Nandana Jayathilake**

**Dr. Thanuja Darshani**

**Dr. Chulanga Wickramasinghe**

**Dr. Duminda Herath**

**Dr. Inuka Wijegunawardena**

**Dr. Rajeswaran Rajavarman**

**Dr. Shashika Prabuddhani Peiris**

**Dr. Chanaka G. D. Vitharanage**

## Co-trainee representatives

**Dr. Achala Buddhika Galliyadda**

**Dr. Dhammika Rathnayaka**

**Dr. Nilanka Mudithakumara**

**Dr. Asanka Saparamadu**

## Honorary Advisors

**Dr Adrian Goudie (Australia)**

**Dr. Kylie Baker (Australia)**

**Dr Sudath Weerapperuma (Australia)**

# Young EM forum

# Oral Presentations

**001**

## A COLLAPSED ADOLESCENT GIRL SAVED BY EMERGENCY LAPAROTOMY.

***A.T. Sampath Silva[1], Viraj Jayasinghe[1]***

***[1] Lady Ridgeway Hospital, Colombo***

### Introduction

Haemorrhagic shock in a female of reproductive age group is always a challenge as gynaecological causes should be considered in differential diagnoses (DD) in addition to other common causes. The topmost challenge was to identify whether the culprit was a surgical or medical cause, because laparotomy in a patient with Dengue haemorrhagic shock (DHF) would wave for a disaster.

### Objectives

The case report emphasises the importance of initial management of a patient according to 'Blueprint' and thereby avoiding missed/delayed management of the patient. It also highlights the importance of identifying the possible underlying cause urgently as it carries a huge impact on further management.

### Description

This 13-year-old girl presented with one-day history of severe lower abdominal pain and vomiting. She was in shock and was found to have free fluid by the point of care ultrasound (POCUS) examination. Absence of fever with no detectable pleural effusion suggested remote chances of dengue fever while having six weeks of period of amenorrhea and suspicious social history in a teenage girl compelled to think of an ectopic pregnancy. Gynaecological and surgical referrals were done immediately to manage the possible surgical pathology.

### Outcome

Emergency laparotomy was done and found to have a ruptured ovarian cyst with 2.5 litre of blood in the peritoneum. The patient was sent to surgical intensive care unit for post operative management, and she was discharged at the post op day 4 after full recovery.

### Conclusion

Adhering to key steps in 'Blueprint' (Triage, initial stabilization, directed history and examination, specific management and ongoing care) is utmost important in managing patients in the emergency department. The most appropriate management can be delivered by referring the patient to correct speciality at the correct time.

**002**

## REFRACTORY STATUS EPILEPTICUS- A COMPLICATION OF EDH.

***Dulanga Atapattu*[1]**

***[1] Lady Ridgeway Hospital, Colombo***

### Introduction

Status Epilepticus is a common life-threatening emergency which requires prompt interventions. Scar epilepsy is one among numerous causes that can lead to a status. An intracranial hemorrhage rupt itself or as a complication of its interventions can exert pressure on brain surface & damage neurons leading to scar formation.

### Justification

This case report reveals an incident of refractory status epilepticus with a background history of a previously evacuated extra Dural hemorrhage.

### Objective

Understanding the basis of an EDH leading to scar epilepsy & challenges and limitations in managing refractory status epilepticus in Sri Lankan set up.

### Description

A 4 ½ years old boy was admitted to the PCU with a generalized tonic clonic seizure lasting for more than 10 minutes. He had a history of traumatic EDH at the age of 6 months which required urgent evacuation. Seizure activity was resistant to the first & second line anti-epileptic treatments.

### Conclusion

Extra Dural hemorrhages can lead to scar formation of brain surface by direct or indirect means, even though it's less common. Time & time again, this can arouse seizure activity & even can lead to more disastrous status epilepticus.

**003**

## ST ELEVATION IS IT A FALSE ALARM!!

***E.U. De Silva Jayawarna*[1]**

**[1] *Sri Jayawardenepura General Hospital***

### Background

ST segment elevation (STE) on ECG is an alarming sign indicating Myocardial infarction secondary to coronary artery thrombosis which itself will mandate time critical management that involve reperfusion strategies which will restore the circulation to the myocardium and salvage the cardiac myocytes thus reducing the mortality and morbidity.

ECG is one of the fastest, most cost effective and most feasible methods of detecting Acute Myocardial Infarction. However, not all ECG STE are purely due to coronary artery thrombosis. Studies have shown of the STE encountered in the ED only 7-17% are in line with coronary arterial thrombosis and warrant reperfusion strategies.

### Objectives

The case presentation is to high light that prominent STE on ECG alone can be misleading and multimodal evaluation including history, clinical examination, serial serum analysis for cardiac biomarkers in combination with demonstration of regional wall abnormalities be utilized to decide on the relevance of the STE in ECG.

### Description

A 20year old male who was previously well presented with ischemic type of chest pain associated with radiation and autonomic symptoms with an episode of fever in the morning. Resultant ECG showed Anterolateral STE which was tomb stoning in appearance. Elevated However due to non-progressiveness of the signs and subsequent rising CRP and WBC was diagnosed and managed as pericarditis.

### Outcome

To learn the etiology and probable causes of ST segment elevations in ECG and how to differentiate the ECGs from true ischemic cause as a result of coronary artery occlusion due to thrombus formation.

### Conclusion

Thus, by taking a wholesome approach to the patient with relevant History, Examination and targeted investigation to be able to justify the decision of activating the cardiac catheterization lab.

**004**

# THE FUTURE OF CPR: INTEGRATING CAPNOGRAM ANALYSIS FOR PRECISION VENTILATION: A REVIEW

***G.A. Hansana Sewwandi*[1]**

**[1] *Teaching Hospital, Peradeniya***

## Introduction

Cardiopulmonary resuscitation (CPR) is a critical intervention during cardiac arrest. In the Emergency Department, the application of effective high quality cardiac compressions are generally well practiced.However,achieving an optimum ventilator strategy during CPR is challenging ,particularly controlling and monitoring the tidal volume during manual bag ventiltion.Capnogram analysis, which measures exhaled carbon dioxide (CO2), has emerged as a valuable tool for guiding ventilation during CPR.Unfortunately,the application of chest compressions alter the capnography waveform, complicating the process of analysing the ventilation during CPR.This abstract provides an exploration of the role and significance of Capnogram analysis in optimizing ventilation during CPR.

## Justification

Cardiopulmonary resuscitation quality significantly impacts patient outcomes. Inadequate ventilation or overventilation can have adverse consequences. Hyperventilation results in increased intrathoracic pressure and reduction in cardiac output. Hypoventilation results in hypoxemia and subsequent organ damage. Capnography offers a non-invasive and real -time means to assess the quality of ventilation and prevent the above adverse outcomes.

## Objectives

The primary objectives of this review are to:

- Highlight capnography patterns observed during CPR based on clinical and experimental evidence
- Specific actions taken to address capnography patterns to improve ventilation during CPR

## Description

This review covers the fundamental principles of Capnogram analysis, explaining the Capnogram waveform and its interpretation. It discusses how capnography waveform can guide ventilation by identifying intrathoracic airway closure, thoracic distension, or regular patterns. Based on the pattern, it further discusses on specific modifications which can potentially optimize the ventilatory strategy.

## Conclusion

Capnogram analysis is a valuable and underutilized tool in guiding ventilation during CPR. It provides real-time feedback, and can be used to improve ventilation quality. By doing so, we can anticipate better patient outcomes and a reduction in adverse events during CPR.

**005**

## TOXIC ALCOHOL POISONING

***H.M.G.N. Senavirathna*[1]**

**[1] *National Hospital, Kandy***

### Introduction

Toxic alcohol remains a sight and life threatening medical emergency necessitating prompt management. It presents a significant challenge due to the complexities involved in diagnosis and management. The conundrum for the emergency physician lies when the patient appears intoxicated without a straightforward history of toxic alcohol ingestion. This case presentation highlights the presentation, diagnostic approach, and management of a patient with toxic alcohol poisoning.

### Justification

This study aims to contribute to the existing knowledge of toxic alcohol poisoning with its major challengers encountered in clinical practice. By presenting this topic I emphasize the significance of incorporating toxic alcohol ingestion into the differential diagnosis in a patient who presents to the emergency department with altered level of consciousness.

### Objectives

1. To elaborate on the clinical clues to suspect toxic alcohol poisoning in an intoxicated patient
2. To evaluate the bed side investigations that can be utilized in the emergency department to diagnose a patient with toxic alcohol ingestion.
3. To emphasize the importance of considering toxic alcohol poisoning as a condition necessitating time critical diagnosis and management.

### Description

A 60 year old male presented to the emergency department with reduced level of consciousness after drinking a bottle of illicit alcohol. He had Glasgow coma scale of 10/15. He had respiratory rate of 24 with clear lung fields and the blood pressure was 90/60 mmHg with heart rate 100. He had high anion gap metabolic acidosis with elevated osmolar gap which raised the suspicion of toxic alcohol ingestion and prompted treatment with intravenous Ethanol. Ultimately we were able to save the patient without developing complications and later he was safely discharged home.

### Conclusion

As emphasized by this case study toxic alcohol poisoning is a time critical diagnosis and the prompt management can prevent patients developing sight and life threatening complications.

**006**

## A FATAL THYROID STORM IN THE POSTOPERATIVE PERIOD: A DIAGNOSTIC CHALLENGE

***H.M.M.Y. Herath[1], A.K.C.M. Abeywardhana[1], A.R.M.T.C. Rathnayaka[1], R.M.A.S.K. Ratnayake[2]***

***[1] Teaching Hospital, Peradeniya***

***[2] Faculty of Medicine, University of Peradeniya***

### Introduction

Thyroid storm is a rare condition occurring in individuals with poorly controlled or undiagnosed hyperthyroidism. This can be triggered by abrupt discontinuation of antithyroid drugs, stress, infection, surgery, trauma, and acute iodine overload.

### Justification

Thyroid storm is a life threatening medical emergency requiring immediate and aggressive treatment. It is mainly a clinical diagnosis. Given the rapid progression of symptoms and mutli organ involvement, timely identification and treatment is important.

### Objectives

This case report of encompasses several key points including clinical presentation, diagnostic challenges and treatment strategies.

### Case report

A 65-year-old female patient with bronchial asthma and hyperthyroidism was diagnosed with large retroperitoneal mass probably a lymphoma attached to left kidney with multiple pre aortic lymph nodes. Patient was clinically and biochemically hyperthyroid, therefore surgery was postponed. 3 weeks after increasing the dose of Carbimazole, patient was clinically euthyroid.

Following surgery she was admitted to the Intensive care unit. 8 hours following admission, she developed a fast atrial fibrillation with low blood pressure, high fever spikes. She was immediately cardioverted electrically and following 3 DC cardioversions, sinus rhythm was achieved. Sinus tachycardia was persistent with a low blood pressure.

The clinical picture was consistent with thyroid storm. Aggressive therapy was started with propylthiouracil 300mg stat and 200mg 6 hourly, intravenous hydrocortisone 100mg stat and 50mg 6hourly, metaprolol 100mh 6 hourly.

Despite treatment, patient succumbed to death 24 hours post-operative.

### Conclusion

This case report emphasizes the diagnostic challenges associated with thyroid storm.

The presentation of thyroid storm can be variable. As an emergency physician, being able to recognize symptoms and signs, diagnosing and promptly initiating treatment will improve patient outcome.

**007**

## UNUSUAL PRESENTATIONS OF SNAKE BITES NOT TO BE MISSED

***H.M.S. Herath*[1]**

**[1] *Teaching Hospital, Kurunegala***

### Background

Snake bite is a neglected tropical disease that primarily affects rural farming communities. Around 81410 to 137880 people die each year because of snake bites and around three times as many amputations and other permanent disabilities are caused by snake bites annually.

### Objectives

Most case presentations are with clear history and may bring the live or dead snake. But there are some unusual presentations and clinician should be capable of prompt diagnosis and treatment to save lives.

### Description

A 47-year-old man transferred to T H Kurunegala from a rural district hospital for CT scan brain due to drowsiness and ptosis. This patient found beside a rural path under the influence of alcohol. On admission he is conscious, rational (GCS15/15), drowsy, B/L ptosis and with alcohol smell. The pupils were size 3 and reacted to light equally. His right lower limb showed swelling up to knee with redness and tenderness with suspicious fang marks with some bleeding visible. He was in an indwelling urinary catheter with a small amount of red colored urine. Investigations were normal except aPTT (high), PT/INR (high), WBCT (>20min) and serum Creatinine 300mg.

With clinical suspicion of snake envenoming due to neurological, hematological, local effects and acute kidney injury led to the decision to start polyvalent anti venom treatment. After 20 +10 vials of AVS treatment and 3 cycles of hemodialysis for renal support patient recovered.

### Outcomes.

We could be able to save life without residual effects with prompt diagnosis and treatment.

### Conclusion

The majority of snake bites is presented with obvious history and may bring the dead or live snake to the hospital. However, there are some unusual presentations without a proper history.

**008**

## A HEART BREAK FOR THE BROKEN HEARTED - PARACETAMOL (ACETAMINOPHEN) INDUCED MYOCARDIAL INJURY

***H.S. Udumullage*[1]**

**[1] *Lady Ridgeway Hospital***

### Introduction

Paracetamol poisoning has become one of the most common causes of poisoning among the youth in Sri Lanka. Its easy accessibility has made it suitable for suicide/deliberate self-harm and is a cause of accidental poisoning in childhood.

### Justification

In literature there are several reports describing paracetamol toxicity mainly focusing on the hepatotoxicity. Health care staff are aware of these common effects but some of its detrimental effects are not well known due to the scarcity of cases.

### Objectives

To increase awareness of the other rare toxic effects of paracetamol.

### Case study

36 year old male presented to emergency department 4 hours from a self-ingestion of 40 tablets of paracetamol. His only complaint at admission was moderate abdominal and chest pain. ECG showed ST elevation in infero-lateral leads with reciprocal ST depressions in V2, V3 with Atrial fibrillation.Patient went into cardiogenic shock and he was treated promptly to achieve hemodynamic stability. After a multidisciplinary decision, diagnosis was paracetamol induced myocardial injury and patient was started on N-Acetylcysteine regime while on observation and supportive treatment. Although the mechanism is not well understood, the direct effects of acetaminophen could be due to Depletion of sulphur-hydryl groups interfering with nitric oxide production and endothelial factors leading to coronary ischemia. Hepatotoxicity can cause metabolic derangements and toxins, which can indirectly affect myocardium. Pericarditis, toxic myocarditis, subendocardial necrosis bands, hemorrhages, endocarditis, instances of bradycardia had also been reported in autopsy findings and case studies.

### Conclusion

Cardiotoxicity following paracetamol poses a very dangerous outcome as there are number of cases which reported deaths. Although cases have lessened after the discovery of an antidote, massive overdoses and premorbid conditions can lead to complications. High grade suspicion, early NAC treatment is of paramount importance.

**009**

## COMPLEXITIES IN EMERGENCY MANAGEMENT: A CASE STUDY ON SECONDARY POST PARTUM HEMORRHAGE

***M.H.F. Haseena[1], K.G.I.S. Ranathunga[1], W. Abeykoon[1]***

***[1] National Hospital, Kandy***

### Introduction

Secondary postpartum hemorrhage (PPH) poses a significant clinical challenge in emergency care and obstetric care, warranting careful consideration and proactive management. Unlike primary PPH, which occurs within the initial 24 hours following delivery, secondary PPH manifests after this critical timeframe, presenting unique diagnostic and therapeutic complexities.

### Justification

Given the failure of initial medical management and the subsequent hemodynamic instability, the case warranted urgent surgical intervention .The evolving clinical picture required escalation to more invasive procedures, ultimately leading to unforeseen surgical and medical complications that warranted intensive care for the patient.

### Objectives

The primary objectives were to manage the septic shock and to identify the septic focus, and to attend to uncontrolled bleeding through an emergent evacuation of retained products (ERPC); the hysterectomy was carried along with unilateral salpingo-oophorectomy.

Despite achieving hemostasis, unforeseen postoperative complications emerged, including suspected right-sided ureteric damage and post-operative hemodynamic instability following septic shock associated with renal, hepatic and hematological complications

### Description

Following the hemorrhage, medical management was not adequate to achieve hemostasis, thus, ERPC and subsequent total hysterectomy were performed. The patient experienced postoperative complications, including septic shock, acute kidney injury (AKI), liver failure, and disseminated intravascular coagulation (DIC). To address the ureteric damage, a right-sided nephrostomy was performed, and the patient required lengthy intensive care. Despite the complexity of the case, the patient ultimately achieved a full recovery.

### Conclusion

This case highlights the intricate challenges in managing severe postpartum hemorrhage at emergency care units ,and emphasizes the significance of early multi-disciplinary approach that can prevent diagnose and treat multi organ dysfunction and the resilience of the patient in overcoming complex medical complications.

**010**

## DAMAGE CONTROL RESUSCITATION IN PENETRATING NECK INJURY

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[1] ***National Hospital, Kandy***

### Introduction

Self-inflicted penetrating neck injuries are relatively uncommon in the emergency department. Several vital structures compacted in a narrow space makes the neck more vulnerable for devastating out comes with trauma. As in any trauma, airway management and damage control resuscitation is pivotal in neck trauma management. This concept is very important in the context of resource poor settings where definitive management will require patient transferring in to tertiary care hospitals.

### Background

A 32 years old male patient diagnosed with schizophrenia presented to emergency department of a peripheral hospital one hour following self-inflicted cut injury to the anterior neck by a kitchen knife. On admission to the emergency department he was gasping through the neck wound with unstable hemodynamic.

### Management

Airway management was initiated with preoxygenation through mouth and the neck opening. As initial attempt of conventional intubation was failed a bougie guided intubation through the neck opening was carried out .Massive transfusion protocol was activated and a damage control surgery was conducted with the help of an ENT surgeon from a tertiary care hospital via telemedicine.

### Outcome

Patients airway was secured with a tracheostomy and hemodynamics were improved following damage control resuscitation. Following which patient was transferred for tertiary care hospital for definitive surgery.

### Conclusion

Self-inflicted penetrative neck injuries carry a significant risk to the vital structures of the neck owing to their unsecure arrangements within a narrow space. Early identification of critical injuries and following the basic concepts in trauma resuscitation would secure a better outcome for the victim.

**011**

## SCALPEL CRICOTHYROTOMY TO MANAGE ACUTE AIRWAY OBSTRUCTION DUE TO RETRO-PHARYNGEAL HEMATOMA FOLLOWING A TRAUMATIC CERVICAL VERTEBRAL FRACTURE IN A PATIENT ON PLATELET INHIBITORS

***N.P.P.W. Jayarathna*[1]**

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**Background**

Incidence of failed Endotracheal Intubation and acute airway obstruction (AAO) is very high in the emergency department (ED) necessitating an emergency surgical airway (Scalpel Cricothyroidotomy) to re-establish the airway. Difficulty Airway Society (DSA) has developed a paradigm to manage failed endotracheal intubation (5). Adherence to the DSA algorithm is designed to minimize complications and improve patient outcome in this stressful scenario.

**Objectives**

The case report emphasizes the importance of early recognition of threatened airway and timely management of unanticipated difficult airway adhering to the DSA algorithm ultimately resulting in minimizing the complications and improving the patient outcome.

**Description**

A 64-year-old male, a known patient with hypertension and ischemic stroke presented to ED after a fall from a height. He was on aspirin and clopidogrel at the time of the fall. He was dyspneic, tachypneic and soon after being admitted to the ED, he developed acute respiratory insufficiency and lost consciousness. His oxygen saturation declined 82% on 15l/min oxygen via face mask. Intubation was difficult with blood in mouth and completely obstructed air way with swollen pharynx. Failed Endotracheal Intubation and AAO inn ED necessitated an emergency scalpel cricothyroidotomy to re-establish the airway. Non-contrast Computed Tomography (NCCT) demonstrated a stable anterior vertebral body fracture at C4 vertebral level and a retropharyngeal hematoma obstructing the airway.

**Outcome**

Emergency scalpel cricothyroidotomy was followed by surgical tracheostomy and evacuation of hematoma. The patient was transferred to and managed in the Intensive Care Unit (ICU) with a satisfactory outcome.

**Conclusion**

We report a rare case of retropharyngeal hematoma following a fall from height leading to severe upper airway obstruction, in a patient on aspirin and clopidogrel. Failed endotracheal intubation was managed successfully with scalpel cricothyroidotomy, according to the DAS guidelines.

**012**

## SHOCK IN A WARFARIN-TREATED PATIENT WITH ABDOMINAL AORTIC ANEURYSM

***O.N.M. Fonseka*[1]**

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### Background

Warfarin is an oral anticoagulant which inhibits the synthesis of Vitamin K dependent clotting factors II, VII, IX, X, Protein C and S. numerous studies and reviews have explored the risk of bleeding associated with warfarin. (1–4) It is one of the most common drugs that lead to emergency department visits due to adverse drug events. (5) Severe bleeding events in patients on warfarin therapy, particularly those presenting with shock in a background history of unoperated abdominal aortic aneurysm, pose a complex clinical challenge in the emergency department.

### Objectives

This case report outlines a systematic and practical approach to a patient with shock, focusing on evaluating shock and managing anticoagulated patients experiencing bleeding in the ED. Aim of this case report is to provide valuable insights into the diagnostic challenges and therapeutic strategies associated with this clinical scenario.

### Description

A 74-year-old male patient was admitted to the ED with shock, desaturation, complaining of abdominal pain, multiple instances of coffee ground vomiting, and shortness of breath. The patient had an unoperated aortic arch aneurysm, infra-renal abdominal aortic aneurysm with an intramural thrombus, and was on warfarin therapy without INR monitoring. While a CT aortogram was initially planned, it couldn't be performed due to the patient's lack of consent. The cause of shock was identified as hypovolemia due to upper gastrointestinal bleeding associated with a supratherapeutic INR. Swift initiation of complete warfarin reversal was undertaken due to the significant and rapid nature of the bleeding event.

### Outcome

The patient was successfully resuscitated, and bleeding was controlled with the reversal of the warfarin effect.

### Conclusion

Promptly identifying shock and initiating warfarin therapy reversal, and providing timely resuscitation can effectively control bleeding, improving the chances of patient survival.

**013**

## UNRAVELING TRANSFUSION ASSOCIATED CARDIAC OVERLOAD

***R.D.U.P. Chandrasiri*[1]**

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### Introduction

TACO is a common transfusion reaction in which pulmonary oedema develops primarily due to volume excess or circulatory overload. This can occur with transfusion of any blood component. Risk factors include pre-existing cardiac and possibly renal dysfunction, extremes of age, small stature, low body weight, greater number of units transfused, and faster rate of infusion  Guidelines for the evaluation of transfusion reactions including TACO have been published by the International Society for Blood Transfusion (ISBT), the British Committee for Standards in Haematology (BCSH) of the British Society for Haematology, and the United States Centres for Disease Control and Prevention (CDC) Biovigilance Network. However, there is no uniformly accepted set of diagnostic criteria for TACO.

### Justification

TACO has been reported to be a major contributing factor in mortality from transfusion. True frequency of TACO is difficult to assess due to lack of highly sensitive and specific clinical parameter or laboratory test. TACO is more common than anaphylaxis, acute haemolytic transfusion reactions (AHTR), or transfusion-related acute lung injury (TRALI)

### Objectives

Case report emphasizes the importance of pretransfusion checklist, important differential diagnosis, treatment, strategies to reduce risk of TACO a

### Description

A 27-year-old prim gravida presented with severe abdominal pain, dizziness, confusion, and vaginal bleeding, indicating a ruptured tubal ectopic pregnancy. Patient was in class 3 shock. Initial management included resuscitation, blood transfusions, and emergency laparotomy. Post-surgery, she developed respiratory distress and metabolic acidosis, requiring ICU admission. TACO was diagnosed with the symptoms signs and bed side investigations. Her ICU care involves ventilation in CPAP mode, furosemide infusion.

### Conclusion

Transfusion-Associated Circulatory Overload poses a significant risk in transfusions, contributing to mortality. Effective risk factor assessment and precise blood product administration are pivotal in mitigating this potential threat and lowering associated mortality rates.

**014**

## BRINZOLAMIDE INDUCED QTC PROLONGATION

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### Background

QTc prolongation is an important presentation that can lead to sudden onset life-threatening dysrhythmias such as Torsades de Pointes. Drug induced electrolyte imbalances are a common acquired cause of QTc prolongation.

### Objectives

The case report emphasizes the recognition of remarkably prolonged QTc caused by Brinzolamide induced electrolyte imbalance after the exclusion of other possible causes. Identification and removal of precipitating cause can reverse the electrolyte imbalance mediated QTc prolongation.

### Description

An 83 years old female, a known hypertensive, presented with chest pain since 3 days with maximum pain for 1 hour duration. She was on Brinzolamide eye drops followings eye surgery for 7 days. Her ECG reveled extensively deep T inversions ion antero-lateral and inferior leads with QTC of 670msecs. Her electrolyte reports revealed hyponatraemia, hypokalemia and hypomagnesaemia after exclusion of other possible causes such as myocardial ischemia and increased intracranial pressure.

#### Outcomes

The QTc prolongation induced by Brinzolamide improved with correction of electrolyte imbalances and omission of the culprit drug.

### Conclusion

Recognition of causes of prolonged QTc interval other than myocardial ischema, including drug-related electrolyte imbalances can avoid the precipitation of life-threatening arrhythmias and sudden cardiac death.

**015**

## A MALE WITH REFRACTORY ANAPHYLAXIS RECOVERED BY TIMELY INTERVENTION

***R.M.I.P. Rathnayake*** [1]

[1]***Lady Ridgeway Hospital, Colombo***

### Introduction

Refractory anaphylaxis is a rare form of anaphylaxis, which does not respond to treatment with at least two doses of minimum 300 micrograms of adrenaline.

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### Objectives

This case report emphasizes the importance of initial assessment and identifying the most life-threatening condition without much delay and starting treatment will save the life of the patient.

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### Description

A 65-year-old male patient was brought by the family members with sudden onset chest tightness and collapsed at home. After few minutes, he has regained his consciousness but had a faintish ness and chest tightness persistently with generalized itchy rash. He denied any allergies previously. Quick initial assessment reveals, patent airway with clear lungs, but he was tachycardia (130), had low volume pulse and hypotensive (60/40mmHg).With the high clinical suspicion of anaphylaxis, we gave intramuscular adrenalin (1:1000) 0.5ml to anterolateral thigh, and 18G cannulas were inserted and IV crystalloid 1l bolus was started, Lower limbs were elevated, and Urgent 12 lead ECG was obtained. ECG only had tachycardia and deep Q waves in inferior leads.

After 5 minutes of adrenalin, he had only a slight improvement in blood pressure and pulse volume, and then IM adrenalin was repeated.

### Outcome

Patient was monitored in the high dependency unit along with adrenalin infusion for six hours. His cardiac assessment revealed mild inferior wall hypokinesia. He fully recovered.

He fully recovered and was discharged home two days after.

### Conclusion

In a context of high clinical suspicion of anaphylaxis, treating anaphylaxis should be the priority. Refractory anaphylaxis is a rare form of anaphylaxis which needs further observation along with adrenalin infusion.

**016**

## ANTERIOR CIRCULATION ISCHAEMIC CEREBRAL INFARCTION FOLLOWING RUSSELL'S VIPER BITE

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**Introduction**

Snake bite is a common presentation to the emergency department of Sri Lankan Hospitals. Severe envenomation and case fatalities due to Russell's viper bites are higher compared to other snake bites in Sri Lanka. The currently available Indian polyvalent anti venom is used to treat the Russell's viper bites in Sri Lanka and the decision to administer anti venom is dependent on the clinical and laboratory evidence of systemic envenomation.

**Justification**

Russell's viper envenomation causes local swelling, coagulopathy, and acute kidney injury, neuromuscular paralysis characterized by ophthalmoplegia and ptosis, and rarely respiratory muscle paralysis. Rhabdomyolysis, chronic renal failure, myocardial infarction and secondary hypopituitarism have also been reported following Russell's viper envenomation. Some case studies have reported evidence of ischemic strokes as a complication following Russell's viper bites.

**Objectives**

The case report emphasizes the need of looking for features of ischemic stroke following Russell's viper envenomation.

**Case Study**

A 34 year old man presented to the emergency department with confirmed Russell's viper bite. He had features of local and systemic envenomation. He was treated with 20 vials of anti-venom serum initially and 6 hours later due to the prolongation of WBCT he was given another 10 vials of anti-venom serum. He developed right side hemiparesis and aphasia 10 hours following presentation. A NCCT brain was done and it showed an infarction involving the left anterior cerebral artery territory. Other causes for thrombosis and embolization were excluded. It can be hypothesized that toxin-induced vacuities, pro-coagulant, and platelet aggregating properties of toxins might have given rise to this complication.

**Conclusion**

This case study illustrates that ischemic cerebral infarctions must be looked in to as a complication related to Russell's viper envenomation despite treatment with anti-venom.

**017**

## PATIENT PRESENTING WITH DE WINTER'S ECG PATTERN FOLLOWING COMPLETE OCCLUSION OF LAD

***Shalini Senarathne[1]***
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### Background

The de Winter ECG pattern is an **anterior STEMI equivalent** that presents without obvious ST segment elevation. These patients are suffering occlusion myocardial infarction (OMI) and require immediate reperfusion therapy. Key diagnostic features include ST depression and peaked T waves in the precordial leads. Unfamiliarity with this high-risk ECG pattern may lead to delays in appropriate treatment e.g. failure of catheterization laboratory activation resulting in increased morbidity and mortality.

### Description

A 58 year old male, a diagnosed patient with Diabetes mellitus, presented to the ED with a 2 hour history of central tightening type of chest pain suggestive of ischemic heart disease. ECG revealed up sloping ST segment depressions, tall symmetrical T waves with a significant R wave in leads V1 to V4 suggestive of a de Winters ECG pattern.

Cardiology team was immediately contacted and as per their recommendation, patient was taken for cardiac catheterization laboratory. Angiogram revealed an acute total occlusion of mid LAD artery. Hence a primary percutaneous intervention (PCI) was done to LAD artery.

### Outcome

PCI was successful with complete revascularization of LAD. Post-procedure 2D echocardiogram revealed no Regional Wall Motion Abnormalities with good cardiac output.

### Discussion

There is no guideline recommendation for thrombolysis for patients presenting with De Winter pattern ECG even-though early PCI is recommended. Also, there are reported cases where patients have developed anterior STEMI or gone into cardiac arrest after presenting with De Winter pattern ECG.

### Conclusion

De Winters is a commonly missed or misinterpreted ECG pattern. May result in less favorable outcome. With the current evidence, thrombolysis too could be considered for a patient presenting with De Winter pattern ECG.

**018**

# CASE REPORT ON DELAYED PRESENTATION OF POST-PARTUM CARDIOMYOPATHY WITH INTERNAL JUGULAR VEIN THROMBOSIS

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## Introduction

Post-partum cardiomyopathy (PPCM), a rare but potentially life-threatening condition, poses diagnostic challenges, especially when presentation is delayed. This case report examines the clinical journey of a 30-year-old woman, ten months postpartum, who presented with progressive dyspnoea and right-sided neck pain. The aim is to shed light on the importance of heightened suspicion for PPCM even beyond the conventional presentation period.

## Justification

The delayed diagnosis of PPCM in this case underscores the need for increased awareness among clinicians. Despite the patient seeking medical attention, the correct diagnosis was initially overlooked, resulting in delayed proper intervention. This case emphasizes the significance of considering PPCM in the differential diagnosis of dyspnoea in postpartum women, particularly in the absence of traditional risk factors.

## Objectives

1. To illustrate the clinical presentation and course of a delayed PPCM case.
2. To emphasize the challenges associated with diagnosing PPCM when presented later.

## Description

The patient, a previously healthy 30-year-old mother of three, presented with a two-month history of worsening dyspnoea, ankle swelling and three days history of right-sided neck pain. ETU assessment revealed signs of respiratory distress, sinus tachycardia and an occluded right internal jugular vein with a 2cm clot. Point-of-care ultrasound indicated severe left ventricular dysfunction, prompting the initiation of CPAP and Frusemide. The patient was transferred to ICU for respiratory and cardiac supports including Dobutamine, anticoagulation, heart failure medical management and for close monitoring.

Investigations for potential causes of cardiomyopathy were negative and thus condition was attributed to the PPCM.

## Conclusion

This case report underscores the diagnostic challenges associated with delayed presentations of PPCM and need for a heightened index of suspicion of PPCM among clinicians to ensure timely recognition and intervention.

**019**

## A CASE OF ACUTE KIDNEY INJURY LEADS TO PROFOUND HYPERKALEMIA AND INFEROANTERIOR STEMI

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### Introduction

Acute Kidney Injury (AKI) is a life-threatening condition if not recognized early and treat promptly at Emergency Departments.

### Justification

The most common presentations are palpitation, shortness of breathing, chest pain, nausea or vomiting. This is a rare presentation of hyperkalemia.

### Objective

To explore an uncommon presentation of hyperkalemia complicated with inferoanterior STEMI presented in National Hospital Kandy.

### Case Presentation

A case of a 57-year-old male patient with a history of Type 2 diabetes mellitus and hypertension on metformin and losartan who presented with a 3-day history of vomiting, diarrhea, generalized weakness, and decreased urine output.

Approximately 3 hours after admission to the medical ward, the patient experienced severe epigastric pain, vomiting, sweating and sudden drop in blood pressure (80/40 mmHg) with a thready pulse (96 bpm), coinciding with the complete cessation of urine production. Urgent ECG displayed inferior ST-segment elevation myocardial infarction (STEMI) accompanied by hyper acute T waves in leads V1 toV4 and a prolonged PR interval.

Venous blood gas (VBG) analysis unveiled severe metabolic acidosis (pH 6.83) with a critical decrease in bicarbonate levels (HCO3- 2.3) and hyperlactatemia (lactate 15.0 mmol/L).

However concurrent hyperkalemia management initiated.

During treatment, the patients suffered a cardiac arrest, with successful resuscitation achieved on the first attempt. Tragically, patient succumbed to death subsequently.

Laboratory results the following day disclosed an alarming serum potassium level of 8 mmol/L and a severely elevated serum creatinine level of 1131 µmol/L.

### Conclusion

This case reveals a complex interplay with severe hyperkalemia, acute kidney injury and simultaneous STEMI, highlighting the need for vigilant monitoring and prompt, timely interventions.

**020**

# MYXEDEMA COMA

***Thilina Ariyasinghe*[1]**

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## Introduction

Myxedema coma is a rare, life threatening manifestation of hypothyroidism presenting to emergency departments with hypothermia, altered mental status and features of hypothyroidism. It could be due to culmination of long-standing hypothyroidism or be acutely precipitated by stressors such as hypothermia, infection, myocardial infarction, gastrointestinal bleeding etc.

## Justification

Myxedema coma is a very rare presentation and diagnosis is totally clinical. Unless diagnosed treated early mortality in more than 50%. Therefore awareness on detecting and managing these patients in ED is of paramount importance

## Objectives

1. How patients with myxedema coma presents
2. Main clinical features
3. Resuscitation and initial management in ED

## Description / Case study

A 32-year-old male who is mentally retarded and underwent total thyroidectomy in 2016 for papillary carcinoma presented to the emergency department with generalized body swelling, drowsiness and loss of appetite.

Patient's airway was patent, RR – 12, lungs were clear , SpO2 -93%  BP – 110/70, PR – 57, CRFT, GCS – 9/15 (E-2, V-2, M-5), RBS – 84 mg/dl, Slow relaxing reflexes, Pupils equal, Temperature – 28C, generalized body swelling, dry skin and infected wounds in bilateral feet were noted.. Measures taken to treat hypothermia. ECG sinus bradycardia with a heart rate of 58. VBG unremarkable. Clinical diagnosis of Myxedema coma based on the history and examination findings. Management consists of IV levothyroxine 200 ug, IV hydrocortisone 200mg, IV co-amoxiclav 1.2g to cover any sepsis management of hypothermia.

## Conclusion

Myxedema coma is a rare medical emergency with high mortality. These patients often present with altered mental status, hypothermia and features of hypothyroidism. Diagnosis is made on clinical findings.

Initial resuscitation, thyroid hormone replacement, treat precipitating cause, hypothermia management, and respiratory support be done in the emergency department.

**021**

## THE GREAT MIMICKER; A CASE REPORT ON MYASTHENIC CRISIS

***W.P.W.S. Perera*[1]**

***[1]National Hospital of Sri Lanka***

### Introduction

Myasthenia gravis (MG), is relatively a rare disease. It is a chronic autoimmune disease affecting neuromuscular transmission due to antibody mediated destruction of the postsynaptic membrane, classically characterized by fluctuating weakness of skeletal muscles, and over half of patients present with ocular symptoms. A life threatening manifestation of myasthenia gravis is myasthenic crisis. It is rare for myasthenic crisis to be the first presentation of illness. The case described is of a patient who presented with a short history of progressive dysphagia with unilateral ocular involvement occurring towards the latter part of the disease course, without fluctuating symptoms, presenting with myasthenic crisis as the first presentation of MG.

### Justification

Respiratory distress and dysphagia are common presentations to the Emergency Department. Unusual presentations of MG and complications of the disease such as myasthenic crisis could present with similar symptoms.

### Objectives

This case report discusses the diagnosis, management and avoidance of iatrogenic precipitation of myasthenic crisis.

### Case report

A 59-year-old male presented with complaints of acute onset progressive dysphagia that worsened over 2days, to ENT ward. Examination revealed a unilateral ptosis with some features of respiratory distress. CT head excluded central causes, chest x-rays, fiber optic laryngoscopy was normal with unremarkable lab investigations. Urgent neurology consultation concluded myasthenic crisis with subsequent admission to ICU, and the patient responded well to plasma exchange, immunotherapy, and anticholinesterase and discharged following a good recovery.

### Conclusion

Patients presenting with dysphagia, and respiratory distress, in the absence of underlying pulmonary diseases, should raise a suspicion of diseases of neuromuscular transmission such as myasthenic crisis, especially in the absence of typical ocular manifestations. Clinicians should focus on respiratory support, rule out underlying infections and early initiation of treatment.

**022**

## ISCHEMIC STROKE CAUSED BY CEREBRAL VENOUS SINUS THROMBOSIS IN THE BACKGROUND OF INTERNAL CAROTID ARTERY HYPOPLASIA; A CASE REPORT

***W. S. P. Y. U. S. Yapa[1], N. T. Weerasinghe[1]***

***[1] National Hospital, Kandy***

### Introduction

Cerebral venous sinus thrombosis (CVST) is a rare, but treatable underdiagnosed cause for young strokes. Nevertheless, hypoplasia of internal carotid artery (ICA) as a contributing factor is unique while it is considered as one of the most stable arteries in terms of origin. Co-occurrence of both these conditions is not to be found in the literature.

### Justification

This case report highlights the importance of directing the investigations depending on the history to enhance the diagnostic yield particularly in CVST, thereby facilitating the necessary interventions early.

### Objectives

CVST is a commonly underdiagnosed condition and this case report emphasizes the significance of history in diagnosis.

### Case study

This 31 year old female presented with two days history of headache, followed by altered behavior and left hemiparesis. On examination patient was confused with dense hemiparesis on the left side. NCCT brain showed right MCA territory infarct. With NIHSS score of 29, patient was not thrombolized. As medical management for rising intra cranial pressure failed, patient underwent right fronto temporal occipital hemicraniectomy. Later she underwent CT cerebral angiogram which revealed marked reduction of right ICA caliber along its whole length, which concluded as right ICA hypoplasia with non opacifying MCA beyond M1 segment. Her CT cerebral venogram disclosed filling defect in the left sigmoid sinus, left jugular bulb and proximal part of internal jugular vein, indicating CVST. However, her basic thrombophilic screening was negative. She was started on anticoagulation with warfarin and rehabilitation. Yet her motor deficits persisted with mild improvement in activities of daily living. We hypothesized that venous occlusion leading to vascular insufficiency, in most vulnerable cerebral area in this patient might have caused the stroke.

### Conclusion

In ischemic stroke, history of headache should be evaluated and investigated in the absence of common causes and the investigations should be guided by the clinical features of the patients.

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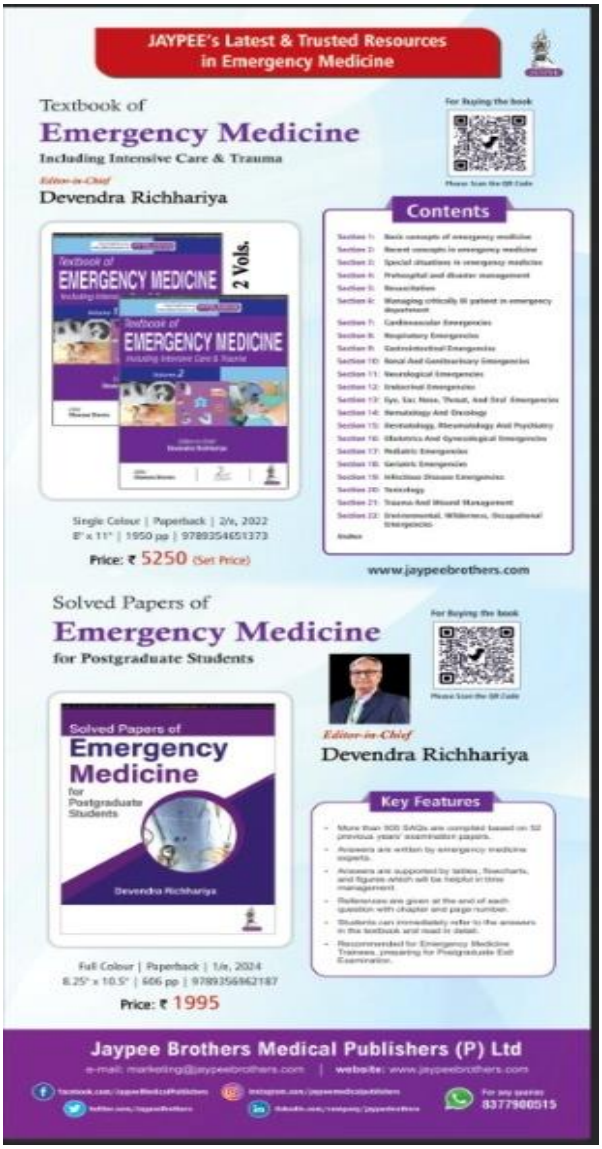


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