



The Official Journal of
Sri Lanka College of Internal Medicine

DOI: <http://doi.org/10.4038/ajim.v1i0.59>

Asian Journal of Internal Medicine

Volume 1 | Supplement 1

ABSTRACTS

SIMCON

2021 *Colombo*

Oral and poster presentations at the
5th Annual Congress
Sri Lanka College of Internal Medicine

18TH - 20TH NOVEMBER 2021 | CINNAMON GRAND - COLOMBO



SIMCON
2021 *Colombo*



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Volume 1 Supplement 1 : Abstracts SIMCON 2021

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ISSN 2950-6948

Published by:

Sri Lanka College of Internal Medicine

Editors:

Dr Suranga Ravinda Manilgama
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Editorial Assistance and Formatting by:

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Cover page designed by:

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THE PRESIDENT

Sri Lanka College of Internal
Medicine



HSathischandra

Dr Harsha Sathischandra

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SIMCON 21, the Annual Academic Sessions of the Sri Lanka College of Internal Medicine, is the highlight of the year long elaborate programme of the College. This year the event will be a hybrid programme held at the Cinnamon Grand Colombo from 18th to 20th November. It is the culmination of the efforts of many made under trying circumstances prevalent due to the vagaries of the pandemic.

We have lined up a varied collection of symposia, plenaries, interactive discussions together with some novel features. As usual we have provided the platform to showcase research of members of the medical community. The College is of the firm view that local research should form the backbone of health policy formation and implementation in this country. We applaud the keen interest shown by researchers this year as well, availing themselves of the opportunity given by SLCIM.

I must specially thank Dr Suranga Manilgama and Dr Madhuwanthi Hettiarachchi, our versatile editors, for their untiring efforts at compiling the abstract book and organizing the related activities.

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The Official Journal of
Sri Lanka College of Internal Medicine

MESSAGE FROM THE SECRETARIES

Asian Journal of Internal Medicine
Volume 1 Supplement 1 : Abstracts SIMCON 2021



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As the Hon. Joint Secretaries of the Sri Lanka College of Internal medicine (SLCIM), we are delighted and honoured to bring this message to the abstract book of SIMCON 2021. This year has been a difficult year for all of us amid a pandemic. Further to our theme 'Integrating medical expertise for optimal patient care amid a pandemic', we would like to highlight that scientific research was the key, in navigating through this pandemic. We believe that it will continue, and will enrich the evidence based practice of medicine further. At a time the scientific community is battling against COVID-19, scientific research was the only guidance we had to find the correct path.

This year we have had an overwhelming response with abstracts. We are glad to note the enthusiasm among researchers to continue their work through this pandemic. We would like to thank all the authors, the reviewers and the judges for helping us to make this exercise of dissemination of knowledge successful.

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It gives us great pleasure to compile these words as the Joint Editors of Sri Lanka College of Internal Medicine. The annual congress is the pinnacle of academic activities in the college calendar. SIMCON 2021 is a hybrid congress held from 18th to 20th of November 2021 in collaboration with the American College of Physicians. This year, SIMCON has received high quality abstract papers from institutions across the country which represent work from both academics and clinicians.

SIMCON 2021 has given due prominence to the scientific papers. Each day will commence with “oral presentations, and mid-day “poster presentations” which will enable the researchers to present their work to a wider audience. Abstract review committee consisted of members of the editorial board, who meticulously reviewed each paper to give the work a due recognition. We must convey our special thanks to all the members of the abstract review committee for their untiring efforts amidst their busy schedules towards submission of the reviews on time. An eminent panel of judges will decide on the two prestigious awards for ‘best oral presentation’ and ‘best poster presentation’ of SIMCON 2021. We sincerely thank them for their valuable time and the decisions. We take this opportunity to congratulate all those jubilant researchers who showcase their work in the SIMCON 2021. Well Done!

Let us have a fruitful time, stimulating ourselves, intellectually and socially, by attending the most wonderful academic accolade of the year and enjoying the fellowship.

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DAY 01 - 19th November 2021

06.45 a.m – 08.00 a.m **FREE PAPER SESSION**

08.00 a.m – 09.00 a.m **GRAND WARD ROUND**

Unravel the mystery

Dr Deepa Amarasekera (SL)

Prof Udaya Ralapanawa (SL)

09.00 a.m – 10.15 a.m **SYMPOSIUM 1: NON COMMUNICABLE DISEASES**

CVD risk assessment in Sri Lankans: Where are we

Prof Shanthi Mendis (Switzerland)

South Asian dyslipidaemia: The difference

Dr Devaki Nair (UK)

Obesity: How to tackle in the clinic

Prof Naval Vikram (India)

10.15 a.m – 10.45 a.m **TEA BREAK | POSTER VIEWING**

10.45 a.m – 11.15 a.m **PLENARY 1**

Reducing mortality and morbidity in diabetes, a look at the post SGLT2 inhibitor era

Prof Arjuna Medagama (SL)

11.15 a.m – 11.45 p.m **PLENARY 2**

“To do or not to do”: Ethical dilemmas in end of life care

Dr Arosha Dissanayake (SL)

11.45 p.m – 12.15 p.m **PLENARY 3**

What’s new in the treatment of Bronchial Asthma?

Prof Channa Ranasinha (SL)

DAY 01 - 19th November 2021

12.15 p.m – 01.00 p.m **LUNCH | POSTER PRESENTATION**

01.00 p.m – 01.45 p.m **An interactive session on Atrial Fibrillation**

Dr Rohan Gunawardena (SL)

Moderator: Dr Wimalasiri Uluwattage

01.45 p.m – 03.00 p.m **SYMPOSIUM 2 : COVID-19**

**Genomic sequencing for surveillance for SARS –
CoV-2 variants of concern**

Prof Neelika Malavige (SL)

Management of COVID-19: A case based discussion

Dr Ananda Wijewickrama (SL)

Post COVID complications

Dr Parthipan Pillai (UK)

03.00 p.m – 03.30 p.m **VETERAN'S FILE**

Errors in Neurological Diagnosis

Prof Saman B Gunatilake (SL)

03.30 p.m – 04.00 p.m **PLENARY 4**

**Investigating a patient with suspected allergy – A
practical approach**

Prof Suranjith Seneviratne (UK)

04.00 p.m – 04.30 p.m **BRIEF VISITS**

SK-INformation for the internist

Dr Chalukya Gunasekera (SL)

04.30 p.m – 05.00 p.m **TEA BREAK**

05.00 p.m – 05.30 p.m **PLENARY 5**

**An Internists' Updated Diagnostic Approach to
Vasculitis**

Prof Robert McLean (USA)

07.00 p.m **PRESIDENT'S DINNER**

DAY 02 - 20th November 2021

06.45 a.m – 08.00 a.m **FREE PAPER SESSION****08.00 a.m – 09.00 a.m** **GRAND WARD ROUND****A patient with dengue hemorrhagic fever and liver failure with hyperinflammatory state**

Dr K T Sundaresan (SL)

A 60-year-old woman with recent onset backache; intricacies in the management

Prof Sarath Lekamwasam (SL)

09.00 a.m – 10.15 a.m **SYMPOSIUM 3: RADIOLOGY FOR THE INTERNISTS****Pearls and pitfalls in CT and MRI : A case based discussion**

Dr Eranga Ganewatte (SL)

Radionuclide Imaging – A case based discussion

Dr Aruna S Pallewatte (SL)

How I use CT Coronary Angiogram in Clinical Practice

Dr Suresh Fernando (UK)

10.15 a.m – 10.45 a.m **TEA BREAK****10.45 a.m – 11.15 a.m** **PLENARY 6****NAFLD in Diabetes – The role of the Physician**

Prof Anuradha Dassanayake (SL)

11.15 a.m – 11.45 a.m **PLENARY 7****Challenges and opportunities for improving outcomes in diabetic nephropathy**

Dr Janaka Karalliedde (UK)

DAY 02 - 20th November 2021

11.45 a.m – 01.00 p.m **SYMPOSIUM 4 : HOW I APPROACH CLINICAL DILEMMAS**

Transient Loss of Consciousness – brief summary
Dr Namal Weerasuriya (UK)

Multiple somatic symptoms; A shape we wouldn't see when wound up tight in a ball. How to unravel?
Dr Harshini Rajapakse (SL)

A clinical approach to poisonings of unknown origin
Dr Madhuwanthi Hettiarchchi (SL)

01.00 p.m – 02.00 p.m **LUNCH | POSTER PRESENTATIONS**

02.00 p.m – 03.15 p.m **SYMPOSIUM 5 : ACUTE MEDICINE**

Acute SOB : A case based discussion
Dr Krishantha Jayasekera (SL)

Extended focused assessment with ultrasonography in Internal Medicine
Dr Arosha Abeywickrama (SL)

Caring for patients with Shock at Acute Medical Unit: A case based discussion
Dr Ganaka Senaratne (SL)

03.15 p.m – 03.45 p.m **VETERAN'S FILE**

A compendium of challenging clinical scenarios and the art of Clinical Medicine as reflected by a veteran internist
Prof K H Sellahewa (SL)

03.45 p.m – 04.15 p.m **BRIEF VISITS**

Rhino cerebral mucormycosis
Dr Primali Jayasekera (SL)

Acute visual loss
Dr Charith Fonseka (SL)

DAY 02 - 20th November 2021

- 04.15 p.m – 04.45 p.m** **SIMCON quiz & Awards**
Prof Manoji Pathirage (SL)
- 04.45 p.m – 05.15 p.m** **TEA BREAK**
- 05.15 p.m – 05.45 p.m** **PLENARY 8**
Navigating thyroid dysfunction through case studies
Dr Lillian F Lien (USA)

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Oral Presentations (OP)

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OP 001

Predictive value of initial liver enzyme levels on the extent of liver damage in dengue

Ralapanawa U¹, Kularatne SAM¹, Karunathilake EMPW1¹, Alawattegama ATM¹, Gunrathne M¹

¹Department of Medicine, Faculty of Medicine, University of Peradeniya, Sri Lanka

Introduction: Involvement of liver with deranged liver function tests is likely in dengue fever.

Objective: A group of dengue patients was studied to determine whether the initial liver aminotransferase level significantly predicted the aminotransferase level later on in the illness.

Methods: This retrospective study was conducted on patients admitted to a tertiary care hospital in Sri Lanka with dengue in 2017. All data were collected systematically and analysed.

Results: A total of 514 participants were included in the study (76.9% males) with a mean (SD) age of 33.31 ± 14.89 years. A simple linear regression was calculated to predict the day five alanine transaminase (ALT) level (ALT₅) based on day three ALT level (ALT₃). A significant regression equation was found ($F(1,512)=291.188, p<0.001$), $ALT_5=42.522+0.801(ALT_3)$. The same analysis was done to predict the day five aspartate transaminase (AST) level (AST₅) based on day three AST level (AST₃). A significant regression equation was found ($F(1,507)=262.914, p<0.001$), $AST_5=58.857+0.922(AST_3)$. The same analysis was done considering males and females as separate groups. For ALT and AST, the slopes for the female group were 1.025 ($p=0.016$) and 1.200 ($p=0.015$), respectively, significantly higher than the slopes for the male group 0.714 and 0.701.

Conclusion: An increasing trend in liver enzyme levels from day three to day five of dengue fever suggests that a higher enzyme level on day three has an excellent predictive value of an even higher enzyme level on day five. However a normal liver enzyme level on day three does not exclude a higher enzyme level later, hence the extent of liver damage. The increment of liver enzyme levels concerning the initial enzyme level is more in females than in males.

OP 002

Efficacy and safety of once weekly thyroxine versus daily thyroxine as maintenance therapy of hypothyroidism: a randomised controlled clinical trial

Wijekoon CN¹, Bulugahapitiya U², Kaluarachchi V², Praveenan S², De Silva CH², Wellala V², Jayasuriya A², Wijetunge U², Rahuman MBF³, Hewa SP⁴, Senaratne BCV¹

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³Cardiology Unit, Colombo South Teaching Hospital

⁴Chemical Pathology Department, Colombo South Teaching Hospital

Introduction: Weekly dosing of thyroxine improves compliance.

Objective: We aimed to evaluate efficacy and safety of once weekly dosing of thyroxine compared to daily dosing for maintenance therapy of hypothyroidism.

Methods: This is a preliminary report of a parallel-group, outcome-assessment-blinded, randomised, controlled clinical trial conducted at a tertiary care hospital in Sri Lanka. Those diagnosed with primary hypothyroidism and have achieved euthyroidism with a stable dose of daily thyroxine for at least 3-months were recruited. Intervention group (IG) received seven times the regular dose once weekly. Control group (CG) received regular dose daily. Echocardiogram, blood pressure (BP), heart rate (HR) and Hyperthyroid Symptom Score (HSS) were assessed 4-6 hours after the first dose of thyroxine. Thyroid functions were assessed at 12-weeks.

Results: Number recruited was 32 to IG (women:96.9%; mean-age:47.9±9.2years) and 24 to CG (women:95.8%; mean-age:50.7±11.2years). Median thyroxine dose was 525mcg weekly in the IG and 75mcg daily in the CG. Proportion of patients in euthyroid state at 12-weeks was not different between the groups (IG-84.4%, CG-83.3%, p=0.57). There was no difference in the thyroid function tests at 12-weeks (mean TSH: IG-2.8µIU/mL, CG-2.1µIU/mL, p=0.348; mean free T4: IG-1.2ng/dL, CG-1.3ng/dL, p=0.445). Safety outcomes at 4-6 hours after first dose were not different between IG and CG (mean end-diastolic diameter: IG-42.1mm, CG-39.9mm, p=0.14; mean ejection fraction: IG-60.28%, CG-60.33%, p=0.911; mean systolic BP: IG-119mmHg, CG-120.8mmHg, p=0.676; mean HR: IG-75.6bpm, CG-75.4bpm, p=0.261; mean HSS: IG-3.5/40, CG-4.8/40, p=0.213).

Conclusion: This preliminary report indicates weekly dosing of thyroxine is as efficacious and safe as daily thyroxine for maintenance therapy of hypothyroidism. Further research with a larger sample size is recommended.

OP 003

Standards of care of management of diabetes among rural cohort in Sri Lanka – a descriptive study

Chathuranga PADU¹, Meegodawidanage N², Rathnayaka TM³, Luke WANV⁴, Mettananda KCD⁴

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³Base Hospital Madawachchiya

⁴Department of Pharmacology, Faculty of Medicine, University of Kelaniya

Introduction: Type 2 Diabetes mellitus (T2DM) is a challenge to health care leading to increase in morbidity and mortality.

Objective: We conducted a descriptive study in rural Sri Lanka to assess the standards of care and disease control among patients with diabetes to identify areas for improvement.

Methods: A retrospective follow-up study was conducted in five hospitals in Anuradhapura district. All type 2 diabetic patients, diagnosed and started on oral hypoglycemic drugs 24 months prior to recruitment, who attended the above clinics during the study period were enrolled to the study. Data on demographics, medications and blood sugar control were collected using an interviewer-administered questionnaire and perusing medical records. Drug compliance was studied using a self-administered questionnaire.

Results: Control of Diabetes and other cardiovascular risk factors 2 years following initiation of oral hypoglycaemic drugs in 421 patients (19.2% male, mean age 58.3±10.4 years) were studied. Even after 2 years of medications, 48.2% were overweight, 34.0% obese and 53.9% were physically inactive. Prevalence of medication use among them were, metformin 96.7%, statins 64.1 % and anti-hypertensives 49.4%. Their mean Fasting Blood Sugar(FBS) was 139±54.3 mg/dl and Body Mass Index(BMI) was 26.5±4.5kgm⁻². Poor compliance to medication was found in 60.3%. Sub-optimal risk factor control, FBS >130mg/dl, blood pressure >130/80mmHg, and LDL >100mg/dl were seen in 45.1%, 19.94% and 16.1%, respectively.

Conclusion: Even though majority were started on necessary medicines, FBS control was poor in this rural population. The reasons behind poor FBS control need to be studied and addressed to improve care of patients with diabetes in rural Sri Lanka.

OP 004

Post-acute COVID-19 symptoms in patients who have been discharged from a tertiary care hospital

Indrakumar J¹, Matthias AT¹, [Wanigasuriya R¹](#), De Silva R¹

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Introduction: A significant proportion of patients continue to have symptoms for a prolonged period of time following acute COVID-19 infection which is called post-acute COVID-19 syndrome/"long COVID". As a result, patients are in a state of uncertainty and anxiety as there is no established mechanism available to identify and guide such patients for follow up.

Objective: To describe the characteristics of persistent symptoms of patients who have been discharged from a tertiary care hospital.

Methods: This descriptive cohort study was conducted at a tertiary care hospital in Sri Lanka, among patients with laboratory confirmed COVID-19, discharged from the hospital, with persistent symptoms after 1 month. A telephone survey was used to collect data.

Results: A total of 150 patients (50% female) were included in the study with a mean age of 48 years, of which 74.7% had not required supplemental oxygen during the acute infection, while 20.7% required supplemental oxygen, 4% required ICU care and 0.7% required intubation. Of the symptoms reported by these patients one month after the acute infection, the most frequently reported symptom was fatigue (64%), followed by musculoskeletal pain/discomfort (37.3%) and headache (36.7%). The most common respiratory symptom was dyspnoea (30%), the most common psychological symptom was anxiety (12.6%). Many patients have been able to get back to their activities of daily living and have returned to work/ studies following their acute COVID illness. Patients were asked to rate their overall health after COVID on a scale of 1 to 10. 12% gave a score between 0-5 while 88% gave a score between 6-10.

Conclusion: Majority of the hospitalized patients were suffering from mild infection in terms of Oxygen requirement. There was however, a significant prevalence of physical and mental health symptoms one month following infection. Only a minority of the study population was severely affected by post COVID symptoms in terms of their overall health and ability to return to previous routines.

OP 005

Audit on hand hygiene practices at a tertiary care medical unit in central province

Jayasinghe IK¹, Perera UAWL¹, Dayaratna UHJP¹, Premaratne BG¹, Amarasinghe WGMD¹, Hettiarachchi NM², Manilgama SR³, Kularatne WLR⁴, Rotuwegama RSHT⁴, Abeywickrama UK⁵

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Introduction: The number of admissions related to COVID-19 have gone up exponentially during the fourth wave of the pandemic. A significant number of health care workers (HCWs) have contracted the disease. Among other preventive measures, hand hygiene (HH) is equally important to curtail the disease spread.

Objective: An audit was conducted to assess the adherence to HH recommendations amongst the HCWs at a medical unit in a tertiary care hospital Sri Lanka in July 2021.

Methods: Audit standards were set to WHO (5 moments HH): any HCW involved in patient care needs to clean their hands at the right times. Four doctors were trained using WHO HH audit tool and asked to discreetly observe up to four HCWs to assess HH over 20-minute sessions. Compliance in total (TC), each moment and each HCW category were calculated in percentages. Compliance of 100% is the gold standard.

Results: 1134 opportunities were observed. TC was 48.8%. Compliance rates were, before patient(M-1): 50.1% (170/339), before aseptic procedures(M-2): 67.4% (29/43), after body fluids(M-3): 71.4% (15/21), after patient(M-4): 69.2% (234/338) and after patient surrounding(M-5): 26.7% (105/393). Compliance of doctors, nurses, HC assistants, allied HCWs, medical students and nursing students were 54.39%, 49.61%, 42.21%, 4.76%, 37.14% and 11.76% respectively.

Conclusions: HH compliance was not satisfactory among all categories of HCWs at the observed medical unit and, may have contributed to recent COVID infections among HCWs. Low compliance in moment 1 and 4 directly leads to cross infections. After organising awareness programmes and reinforcement of HH techniques, a re-audit is recommended to assess the improvement.

OP 006

A case series of Metformin-associated lactic acidosis following metformin overdose

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Introduction: Metformin overdose is relatively uncommon but carries serious consequences. Metformin-associated lactic acidosis (MALA) is a potentially fatal, rare complication. We present a series of 5 cases where MALA occurred following severe overdose at a tertiary care unit in Sri Lanka.

Case presentation: There were 4 females (aged 16-18 years) and a male (70 years). The minimum number of tablets taken was 40 while maximum is 112. The duration from ingestion to hospital admission varied between 3-24 hours. Two were hypotensive on presentation and another two developed hypotension later. Their arterial blood gases showed pH varying from 6.8-7.32, bicarbonate varying between 3-12mmol/L with severe, high anion gap metabolic acidosis. All patients had evidence of severe lactic acidosis (10-15 mmol/L) despite the time of admission. Except the male patient who had repeated hypoglycemia, others had normal or high blood sugar levels. Bicarbonate infusion was started in all, while inotropes were needed in three patients. One patient who was offered early high dose insulin euglycemic therapy (HIET), was managed without inotrope support. Potassium was carefully monitored and supplemented. Three developed acute kidney injury. The 16-year-old patient who ingested 112 tablets, underwent late CRRT (after 20 hours), succumbed to multiorgan failure. Haemodialysis or CRRT was offered for the others within 6-10 hours and they fully recovered after 5-18 days of admission.

Conclusion: Further studies are needed to prove that delay in presentation, severity of the overdose and delay in starting dialysis are associated with poor outcome (death or prolonged ICU stay) as seen in these five cases. HIET which has proven effectiveness in metformin toxicity, worked on our patient.

OP 007

Emotional intelligence and its possible association with some selected socio – demographic factors, academic performance and extracurricular activities of medical undergraduates from a selected government medical school

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Introduction: Emotional Intelligence (EI) is the ability to understand one's own emotions, the emotions of others, and being able to analyse them correctly. As a profession which thrives on human interaction, practicing medicine requires good EI.

Objective: This study aims to assess the EI of medical students of a selected university in Sri Lanka and explore likely associations.

Methods: A descriptive cross-sectional study was done. EI was measured by an internationally validated self-administered questionnaire while demographic factors were obtained using another tool. Sample size was 350. Pearson Chi-squared test with 95% confidence was used to assess possible associations.

Results: EI has three dimensions: sensitivity, competence and maturity. The mean sensitivity, maturity and competence scores of the students fell into the moderate EI, high EI and extremely high EI categories respectively. The number of years students spent in the university didn't show a statistically significant association with the level of EI. The mean sensitivity and competence scores of females were seen to be higher than males ($p < 0.001$, $p = 0.57$ respectively). Males had a higher maturity score compared to females ($p = 0.65$). Students who participated in extracurricular activities had a higher mean EI in all three dimensions compared to students who didn't participate. The average maturity and competence of those living in boarding houses and hostels were higher than that of those living in their own residence.

Conclusion: Engaging in extracurricular activities during undergraduate period might improve EI of medical students.

OP 008

Adverse events following first dose of ChAdOx1 nCoV-19 (Covishield) among health care workers in Sri Lanka

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Introduction: A community vaccination programme is crucial to combat COVID-19 pandemic. An independent post-vaccine surveillance is important to identify adverse events following immunization (AEFI) in the population.

Objective: To estimate the prevalence of AEFI after covishield vaccination among all categories of health care workers (HCWs) after the first dose.

Methods: A multicentred cross-sectional survey was conducted in six provinces. A self-administered questionnaire was used to gather demographic data and AEFI.

Results: Of 5140, 67.8% were females. The mean (SD) age was 40.69 (± 10.07) years. At least one comorbidity was reported in 15.4%. At least one AEFI was reported in 86.6% and 49.3% had local AEFI. Bodyaches (54.4%), headaches (57.3%), fever (58.4%), chills (51.2%), fatigue (37.5%) and arthralgia (36%) were the most reported systemic AEFI. Majority lasted <24 hours. Pain and redness at the site were the most reported local AEFI. Mean duration of onset of fever and site of pain was 6.65 and 9.67 hours respectively. The population was divided into two groups according to the mean age; ≤ 40 and > 40 years and, study parameters were compared. Most of the systemic (fever, nausea, fatigue, itching) and all local AEFI were significantly higher among the ≤ 40 -year-old group. Reactions occurred within first 20 minutes in 2%. Anaphylaxes developed in 12 patients. History of anaphylaxis, drug, or food allergies were reported in 0.6%, 2.8%, 6.7% respectively, they didn't show significant relation to current vaccine induced allergies or anaphylaxis. Despite having minor AEFI, 71.1% attended routine work while 0.2% were hospitalised and treated.

Conclusion: Majority reported minor AEFI. Only a few had serious AEFI. Overall, the first dose of the Covishield vaccine was well-tolerated by HCWs.

OP 009**Improving decision making and documentation regarding advanced resuscitation decisions in a tertiary care centre in Sri Lanka**

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Introduction: Advanced resuscitation decisions are important to prevent negative outcomes at end-of-life.

Objective: To assess the current practice of advanced resuscitation decisions and introduce interventions to improve the same.

Methods: We conducted a clinical audit at a tertiary care centre in Sri Lanka. An auditor-administered questionnaire developed through a focused group discussion was used to analyse the medical records of deaths (40) during a period of sixty days, focusing on advanced resuscitation decisions and factors affecting them. Junior doctors directly involved in the care of each patient were interviewed regarding their retrospective judgement about the most appropriate resuscitation decision, which was later compared with the decision of an expert panel, whose decision was based on the medical records. An educational session was conducted to improve the knowledge of doctors about resuscitation decisions and a standard format was introduced to document them. The outcome was reassessed after sixty days (38 deaths).

Results: There was a significant improvement in the number of documented advanced resuscitation decisions from 10% to 44.73% ($p=0.0006$), with a significant increase in Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) decisions from 10% to 36.8% ($p=0.005$) following the intervention. Unsuccessful CPR attempts decreased significantly from 77.5% to 36.8% ($p=0.0003$). The resuscitation decisions suggested by junior doctors that matched with expert decision increased significantly for both interns (from 27.5% to 57.9%, $p=0.0066$) and registrars (45% to 71.05%, $p=0.0202$).

Conclusion: Documentation and practice regarding advanced resuscitation decisions is suboptimal in the study group. This can be improved by educating doctors and introducing a standard format to document resuscitation decisions.

OP 010

Identifying host markers of dengue disease severity: a mass spectrometry-based approach

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Introduction: There are no biomarkers to predict dengue haemorrhagic fever (DHF) during early dengue disease.

Objective: To identify differentially regulated host proteins in peripheral blood monocytes (PBMCs) of DHF patients to be used as potential disease markers.

Methods: Blood was collected from 2 healthy controls, 4 dengue fever (DF) and 4 DHF patients hospitalised in July 2018 during the first 72 hours of illness before development of fluid leakage. Samples of ten were used to suit the 10-plex tandem mass tag (TMT) mass spectrometry approach. PBMCs were isolated using a ficoll-gradient approach. Peptides from cell lysates were analysed by TMT mass spectrometry to identify differentially regulated (mean fold change >2) proteins in DHF compared to DF. Ingenuity pathway analysis and SPSS software packages were used to identify up- or down-regulated biological processes and assess statistical significance.

Results: There were 87 proteins differentially expressed in dengue-infected cell lysates compared to healthy controls. DHF lysates had 92 proteins differentially expressed compared to DF. Humoral immune response pathways, neutrophil degranulation and IRE1-mediated UPR pathways were upregulated while proteins in platelet activation/degranulation, blood coagulation, regulation of body fluids were down-regulated in DHF compared to DF. Twenty one proteins (6 up-regulated and 15 down-regulated) were significantly different in DHF samples compared to DF ($p < 0.05$).

Conclusion: A mass spectrometry-based approach identified 21 proteins differentially expressed in DHF monocytes and this study provides a foundation to validate selected markers in a larger cohort of patients.

OP 011**Humoral immune response to two doses of AZD1222/ Covisheild vaccine among health care workers from a teaching hospital in Sri Lanka**

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Introduction: Within a year of reporting first case of SARS CoV-2 infection from China, vaccines for COVID-19 were developed and used in mass immunization campaigns worldwide.

Objective: To assess the immunogenicity of two doses of Covisheild vaccines, employing the antibody (Ab) development in the host using a cohort of 177 health care workers.

Methods: The antibody response was assessed at 3-4 weeks after each vaccine dose, and just before the 2nd dose using two-site sandwiched immunoassays technique developed to detect IgG by Ortho Clinical diagnostics.

Results: The mean age of participants was 44.2 years (range 23-68) and 60% were females. None of them had Polymerase chain reaction (PCR)-positive COVID-19 infection at the time of inclusion in the study. Majority (60%) experienced fever and myalgia following the 1st dose. Mean (SD) antibody index after 1st dose was 5.8 (\pm 4.3) with 82.5% overall seroconversion. It significantly reduced to 64.5% 12 weeks after the 1st dose (just before the 2nd dose) ($p=0.001$). Second dose of vaccine significantly increased seroconversion rate to 98.9% ($p=0.000$). Seroconversion rates were highest in middle-aged individuals while it was lowest in >60 years. Of seronegative participants at initial antibody assessment, 50% ($n=4$) in <40-year age group achieved seroconversion after 2nd dose.

Conclusion: Majority showed seroconversion irrespective of age and sex after a single dose of vaccine, and it increased significantly by 2nd dose of the vaccine. Although a single dose of vaccine induced an excellent Ab response, it significantly reduced after 12 weeks. Therefore, long-term persistence of Ab response for the Covisheild vaccine needs to be assessed.

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The Official Journal of
Sri Lanka College of Internal Medicine

Asian Journal of Internal Medicine

Volume 1 Supplement 1 : Abstracts SIMCON 2021

Poster Presentations (PP)

SIMCON 2021
5th Annual Congress
Sri Lanka College of Internal Medicine



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PP 001

Knowledge and self-confidence regarding diagnosis and management of anaphylaxis among post-intern doctors

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Introduction: Early recognition and appropriate management of anaphylaxis save lives.

Objective: To assess knowledge and self-confidence regarding diagnosis and management of anaphylaxis in a group of post-intern doctors.

Methods: This cross-sectional study included post-intern doctors who were graduates of three selected Sri-Lankan universities and had completed internship in September 2020. Consecutive sampling was done. Data were collected within 3-months of completion of internship, using a self-administered questionnaire.

Results: 285 participated (response rate-74%). 26.3% identified all stated triggers. Only 13% correctly diagnosed all ten case-scenarios given. 91.6% were correct regarding both 1:1000 adrenaline as first-line treatment and its route of administration. 80.7% and 61.4% knew correct adult and paediatric doses of adrenaline, respectively. 25.3% would inject adrenaline to deltoid. 5.6% and 4.9% stated adrenaline is contraindicated in ischaemic heart disease and tachycardia, respectively. 26.7% were incorrect on positioning of patient. Only 54% agreed follow-up is needed. Mean scores for case diagnosis and anaphylaxis management were 8.06/10(SD=1.4) and 17.01/20(SD=1.9), respectively. On regression analysis final-MBBS result was the only independent predictor of diagnosis score ($p<0.001$) and management score ($p<0.001$); gender, type of hospital and unit, doing a medicine appointment, number of co-house officers or number of anaphylaxis patients diagnosed/managed were not predictors of scores. Proportions having self-confidence in diagnosing and managing anaphylaxis were 91.9% and 80.4%, respectively. There was a positive correlation between diagnosis-score and self-confidence in diagnosis ($rpb=0.139$, $p=0.019$)

Conclusion: Knowledge and self-confidence regarding diagnosis and management of anaphylaxis were sub-optimal among study participants. Knowledge did not depend on internship-related factors. Self-confidence in diagnosis positively correlated with knowledge.

PP 002

Effect of diet and physical activity on the spectrum of acute coronary syndrome in South Asia

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Introduction: Acute coronary syndrome (ACS) is the leading cause of death globally, even higher in South Asian countries.

Methods: This cross-sectional descriptive study was conducted at a tertiary care hospital in Sri Lanka. An interviewer-administered pre-validated structured questionnaire including a food frequency questionnaire was used to collect data, and the analysis was done.

Results: A total of 789 patients with ACS were included in the study with a mean age of 60.76 ± 11.22 (59.6% male). Among them, unstable angina (UA), NSTEMI, and STEMI were present in 38.0%, 32.1% and 29.9% respectively. The mean number of times food consumed per week was analysed. Majority consumed rice (24.7 ± 15.9) and vegetables (17.1 ± 11.6) ($p < 0.001$). The intake of meat, eggs, salty foods, and nuts was < 1 per week. Consumption of milk products was higher in UA (6.15 ± 4.84) than NSTEMI (4.12 ± 3.80) ($p = 0.007$). Other foods did not show significant differences with the ACS spectrum. The mean hours of physical activity per week were analyzed. NSTEMI (5.74 ± 13.05 , $p = 0.022$) and STEMI (5.94 ± 12.26 , $p = 0.012$) patients engaged in vigorous physical exercise more than UA (1.78 ± 5.24). STEMI patients engaged in more moderate exercise (14.69 ± 14.47) than NSTEMI (10.26 ± 1.25) ($p = 0.040$). There was no significant difference in walking or sitting type physical activities with the ACS spectrum.

Conclusion: The dietary pattern of ACS patients in South Asia does not consist of unhealthy food habits with high-fat content compared to western countries. Engaging in vigorous physical activity is negatively associated with the severity of ACS. The hours of walking and sitting have no association with the spectrum of ACS.

PP 003

Descriptive cross-sectional study on knowledge, awareness and adherence to medication among hypertensive patients in a tertiary care centre, Eastern Sri Lanka

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Introduction: Hypertension is a major global public health problem.

Objective: To assess the knowledge, awareness of hypertension and adherence to medication among hypertensive patients in a tertiary care centre, Sri Lanka.

Methods: The study was conducted among all adult hypertensive patients who were selected by simple randomization for 6 months duration. Data were collected using interviewer administered questionnaires and were analysed using SPSS (version 18) analytical package.

Results: The sample consisted of 153 hypertensive patients with a mean age of 60.78 years (SD ±11.15) of which 66.7% were males. The patients had primary or ordinary level education level (81.7%). The majority had moderate-to-high knowledge (65.8%) and moderate-to high awareness (73.2%) of hypertension. They did not know the normal values of blood pressure (53.6%) and cut-off values of hypertension (73.2%). 87.6% of patients knew that they have hypertension but 70.6% of them did not know their blood pressure value at the time of diagnosis. 52.7% of the patients had no awareness on target organ damage due to hypertension. The main reasons for nonadherence to medication were forgetfulness (32%) and expenses (35.4%). The knowledge and awareness about hypertension among respondents were significantly associated with educational level ($p < 0.05$).

Conclusion: Most of the patients had adequate knowledge on the risk factors and complications of hypertension. But they were unaware about their disease status, their diagnosis, target organ damage and recent blood pressure values. The main reasons for nonadherence to medication were forgetfulness and expenses.

PP 004

Knowledge, attitude and practices on COVID-19 among health care workers in selected hospitals in Sri Lanka

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Introduction: Lack of knowledge, inadequate practices, and negative attitudes among health care workers (HCWs) could subsequently lead to them falling ill and putting others' lives at risk.

Objective: Our main objective was to assess the knowledge, attitude and practices related to coronavirus disease (COVID-19) among healthcare workers in selected hospitals in Sri Lanka.

Methods: This descriptive cross-sectional study was conducted in 12 hospitals between June and September 2020. Data was collected using a self-administered questionnaire. The knowledge, attitudes and practices sections consisted of 10, 15 and 15 questions respectively. Cut off levels >75% and >87% were considered "good" knowledge and "good" practices, respectively. A mean score of >46 is considered a positive attitude. Software for Statistics and Data Sciences (STATA) Version 40 was used for data analysis. The comparison was done using multivariable analysis.

Results: There were 651 (90.1%) respondents (66.5% females, 48% doctors and 52% nurses). 69.4% had "good" knowledge, 50% positive attitude and >95% practiced preventive measures. 84% of participants disagreed on giving minimum care to COVID-19 patients. 51.5% were not worried to treat COVID-19 patients. Their mean score was >46 in attitude section. Good knowledge of COVID-19 was associated with being a doctor (OR=1.12; 95%CI: 1.007-1.3). Good practices were associated with adequate knowledge (OR=2.12; 95% CI:1.5-3.0), being married (OR=1.4; 95% CI:1.02-2.0), and being a doctor (OR=1.2; 95% CI:1.1-1.24).

Conclusion: Although overall knowledge, attitude and practices are satisfactory, it is important for HCWs to have excellent knowledge, 100% adherence to preventive measures, and maximum positive attitude towards COVID-19 for the purpose of safeguarding themselves and mitigating the pandemic.

PP 005

COVID-19 vaccine acceptance and hesitancy among patients with cancer during the COVID-19 pandemic: a systematic review

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Introduction: Patients with cancer are prioritized and recommended to be vaccinated against COVID-19. The benefits of vaccinating cancer patients are more favourable than adverse events.

Objective: This study aims to find the current state and causes for COVID-19 vaccine acceptance and hesitancy among cancer patients.

Methods: PubMed, ScienceDirect, Cochrane COVID-19 study registry and secondary literature were searched from 25th April to 20th August 2021 according to the predetermined search string. Cross sectional studies were selected for the final review. Two authors did the study identification, screening, and eligibility assessment independently two times. This study followed the PRISMA 2020 guidelines and JBI quality appraisal tools.

Results: Total of thirteen studies and reports were selected for the final review. This study includes 12 762 patients (62.23% females). 64.3% of the study participants were willing to be vaccinated (64.3%). On analysis of studies which took gender into consideration 46.1% (n=1078) of females were hesitant to be vaccinated while the males were found to be 38.2% (n=596). Considerations of vaccine-related side effects, vaccine efficacy, and safety, being with active anti-cancer treatments, skepticism of rapid development of the vaccine were the leading causes for vaccine hesitancy. Cancer patients who were hesitant to be vaccinated expressed that they lacked knowledge about the vaccine. Cancer patients were more likely to depend on their oncologist or general practitioner's opinion on COVID-19 vaccination. Attitudes, compliance, and practices with routine influenza vaccination were independent predictors of COVID-19 vaccine compliance.

Conclusion: Well-designed problem-based educational interventions are essential to enhance compliance with COVID-19 vaccination.

PP 006

A survey on knowledge about familial hypercholesterolaemia among doctors in Sri Lanka: a multicentre study

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Introduction: Familial Hypercholesterolaemia (FH) is a genetic disorder affecting low density lipoprotein cholesterol (LDL-C) metabolism. Individuals with FH have a substantially increased risk of coronary artery disease (CAD). South Asia is burdened by premature CAD. Early detection and management of FH can result in a reduction of the burden of CAD. Despite growing awareness, FH remains largely underdiagnosed and untreated. Assessing the present level of knowledge among doctors would help in planning educational activities.

Objective: To assess the level of knowledge on familial hypercholesterolaemia among doctors in Sri Lanka

Methods: Physicians were requested to complete a survey comprising questions on FH. The questionnaire inquired about, familiarity and awareness of the disorder, clinical description, prevalence, inheritance, and treatment.

Results: Of the 269 doctors surveyed, 66.42% correctly described FH and only 16.66% knew about its prevalence. 4.55% were aware of the risk of cardiovascular disease (CVD) associated with FH. 0.75% and 1.5% correctly identified the age threshold for premature CVD in males and females respectively. 87.36% and 54.84% identified statins as monotherapy and statin & ezetimibe as a combination therapy for FH respectively. Furthermore, in practice 44.66% routinely screened the family members for FH. 38.78% of the doctors correctly identified the transmission rate to first-degree relatives.

Conclusion: Substantial gaps are seen in the knowledge on FH. Immediate steps must be taken to increase awareness and knowledge about FH in Sri Lanka.

PP 007**A study on knowledge, attitudes and practices regarding pain management among medical officers in a tertiary care hospital, Sri Lanka**

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Introduction: Inadequate pain management of doctors can result in an increase in hospital stay and delayed recovery of patients.

Objective: To analyse the knowledge, attitudes and practices on pain management among doctors.

Methods: A descriptive cross-sectional study was carried out among 102 subjects. The study was done by simple random sampling of MBBS qualified medical officers at a tertiary care hospital Sri Lanka. A self-administered standardized questionnaire based on "Knowledge and Attitudes Survey Regarding Pain" (KASRP) tool was used for data collection which were analysed using SPSS 20.

Results: There was no statistically significant correlation between years of experience and KASRP score according to the spearman non-parametric test ($p=0.073$). The highest mean KASRP score was among post graduate trainees with a mean KASRP score of 61.9%. There is a statistically significant difference of mean scores between groups of level of qualification of doctors according to the one-way ANOVA test ($p=0.002$).

Conclusion: Knowledge, attitudes and practices on pain management among doctors in the relevant hospital are not satisfactory. Workshops on pain management can be used to improve the knowledge, attitude and practices of pain management among doctors.

PP 008

Parathyroid adenoma presenting as unexplained sinus tachycardia and refractory hypertension: a case report

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Introduction: Primary hyperparathyroidism (PHPT) and malignancy account for most cases of hypercalcaemia in clinical practice. They commonly occur in relation to a solitary parathyroid adenoma, parathyroid hyperplasia, or carcinoma. Majority of patients are asymptomatic, although some present with vague unusual symptoms.

Case Presentation: We report a case of a 50-year-old lady presenting with unexplained resting tachycardia, uncontrolled hypertension and generalised ill-health for one year in the background of complicated type 2 diabetes, dyslipidaemia, and hypertension. She had marginally elevated serum ionized calcium with normal serum phosphate levels in the background of early chronic kidney disease. Intact parathyroid hormone level was elevated with concomitant low levels of vitamin D. Clinical evaluation revealed an anterior neck lump which was ultrasonically suspected as a thyroid enlargement with possibility of a deep-seated parathyroid mass. A sestamibi B scan confirmed the presence of a single parathyroid adenoma. The possibility of Multiple Endocrine Neoplasia (MEN) was ruled out. She underwent a successful partial thyroidectomy with removal of the parathyroid mass. Histology revealed a solitary benign parathyroid adenoma. Following surgery, her calcium levels returned to normal range, her unexplained tachycardia settled and her general wellbeing improved. Her blood pressure was controlled with three antihypertensive drugs.

Conclusion: Hypercalcaemia should be suspected as a rare possibility in the workup of unexplained sinus tachycardia and hypertension. It could be masked due to concomitant vitamin D deficiency.

PP 009

A case series of hospitalized patients with bleeding in COVID-19 while on low molecular weight heparin – a multicentre experience in Sri Lanka

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Introduction: SARS-CoV-2 infection is associated with thrombosis. A few with major bleeding have also been documented. There is no Sri Lankan data on Covid-19 infection and bleeding. We describe 5 cases to enlighten clinicians to look out for fatal bleeding manifestations.

Case Presentation: We describe bleeding in 4 males and a female in the age range 38 – 44 years. Major bleeding (as per International Society on Thrombosis and Haemostasis) was observed in 4 out of 5 cases. One had left psoas haematoma, massive retroperitoneal haemorrhage and bilateral lung haemorrhages. The other three had haematomas in right iliopsoas with right forearm, retroperitoneum and a small haematoma in rectus sheath. All developed bleeding, a week following admission (2nd or 3rd week) while on low molecular weight heparin (LMWH); 4 were on therapeutic doses. Only 2 patients had fibrinogen levels available at the time of bleeding, where it was found to be low/ normal. There was no relationship with platelet count. Moreover, our patients didn't meet criteria for overt Disseminated Intravascular Coagulation (DIC), HLH (Haemophagocytic lymphohistiocytosis) or high blood pressure, which could contribute to bleeding. Four required transfusions of blood with component despite discontinuation of LMWH. Four patients succumbed due to underlying severe COVID-19 pneumonia.

Conclusion: Close monitoring and re-visiting the dose of anticoagulation in COVID-19 infection following a week of admission/ diagnosis is warranted. Large scale studies are required to identify usefulness of fibrinogen as a predictor of bleeding.

PP 010

Laboratory investigations on admission as predictors of outcome in symptomatic COVID-19 patients: retrospective observational study from a single centre

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Introduction: SARS-CoV-2 infection has become an ongoing major health problem around the globe. With the increase in number of patients, it is important to know predictors of severity of the infection for early identification, triage and treatment. Laboratory biomarkers have been studied as predictors of the severity and such studies are lacking in Sri Lankan setting.

Objective: To analyse the correlation of laboratory markers at the time of admission with the outcome in symptomatic Covid-19 patients.

Methods: All patients admitted with symptomatic COVID-19 infection to a base hospital in the central province from October 2020 to March 2021 were included. A panel of investigations done on admission were collected retrospectively. The data were compared between outcomes of the study; either 'discharged' or 'death at hospital'.

Results: Out of 686 symptomatic patients 50.2% were females. Mean (SD) age was 47.45 ±17.35 years. 96.6% were discharged while 3.35% patients died at the hospital. Post Hoc analysis of the differences of total white cell, neutrophil counts and neutrophil/lymphocyte ratio among the discharged and dead groups were found to be highly significant($p < 0.001$). Presence of lymphopaenia was found to be significant in patients who died ($p = 0.001$). Post hoc analysis of platelet count($p = 0.92$), C-reactive protein($p = 0.052$), aspartate transaminase ($p = 0.392$), alanine transaminase ($p = 0.085$) did not show a significant difference between the two groups.

Conclusion: On-admission white cell count, neutrophil count, neutrophil/lymphocyte ratio and the presence of lymphopaenia can be used to predict adverse outcome in symptomatic COVID-19 infection.

PP 011

Are the laboratory parameters helpful in predicting the disease severity and outcome of asymptomatic and mildly symptomatic patients with COVID-19?

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Introduction: The COVID-19 pandemic has made a huge impact globally since late 2019. A detailed analysis of laboratory parameters in asymptomatic and mildly symptomatic (AMS) patients are limited.

Objective: to describe laboratory investigations and patterns to predict the outcome in AMS COVID infection.

Methods: A cross-sectional study was conducted at a designated treatment centre for COVID patients. Consecutive Realtime Polymerase Chain Reaction (RT-PCR) positive AMS patients were recruited from July to August 2020. A pretested questionnaire was used to collect data. Blood investigations were done during the first three days of admission. Descriptive statistics were used.

Results: Of 101, 71.2% were asymptomatic and 28.8% were mildly symptomatic at the time of recruitment. Mean (SD) age was 35.14(±9.13) years. Leukopaenia (<4000 /μL) and neutropaenia (<1500/μL) were seen in 1% of patients. None had lymphopaenia (<1000/μL). 4.9% had thrombocytopaenia (<150×10³/μL). Lowest counts of lymphocytes(L), neutrophils(N) and platelets were 1020/μL, 1220/μL and 123×10³/μL respectively. Mean (SD) N/L ratio was 1.459(±0.672). Peripheral blood films showed significant changes in WBC lineage including reactive and atypical lymphocytes, vacuolated and toxic neutrophils with active monocytes despite being AMS. C-reactive protein, pro-calcitonin and troponin-I levels were normal. 33% had abnormal alanine transaminase (ALT>40U/L) while 2% had >thrice upper limit. Mean (SD) aspartate transaminase (AST)/ALT ratio was 0.851 (±0.336) while 23.4% had a ratio >1. All had uneventful recovery. Mean duration to achieve two consecutive negative PCRs and duration of hospital stay were 25.3 and 21.4 days respectively.

Conclusion: Investigations remain normal in the majority. Cytopaenia alone is not a useful indicator in AMS COVID infections. There was no significant difference between the investigation patterns or the symptomatology with the outcome among AMS patients.

PP 012

Rickettsial myocarditis presenting as aVR ST-segment elevation and ST depression in more than six leads

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Introduction: Rickettsia is a re-emerging zoonotic infection caused by intracellular bacteria belonging to class alphaproteobacteria. The most common symptoms are fever, arthralgia, myalgia, headache while 65% of patients experience a characteristic vasculitic rash and 75% have “eschar” at the flea/tick bite site. Among the complications of rickettsial infection, myocarditis, adult respiratory distress syndrome, respiratory failure and acute kidney injury predominate. Multiorgan involvement in rickettsial infection is secondary to widespread vasculitis. Myocarditis is a rare detrimental complication of rickettsial infection where clinical findings can mimic acute coronary syndrome and heart failure.

Case presentation: A 58-year-old Sri Lankan man presented with features of acute left ventricular failure with a history of constitutional symptoms and fever for five days. Upon admission, blood pressure was 80/50 mmHg with central venous pressure of 16cmH₂O. Electrocardiogram showed ST-segment elevation in lead aVR with widespread ST segment depression in more than 6 leads. High sensitive troponin I was seven times above the upper limit of normal. 2D echocardiography showed 50% ejection fraction and global hypokinesia. The patient’s clinical response to anticoagulation was not satisfactory. Upon serological confirmation of *Rickettsia conorii*, the patient was started on oral Doxycycline which gave dramatic clinical improvement. Subsequent coronary angiogram demonstrated normal epicardial coronary vasculature suggesting the patient’s acute presentation and electrocardiographic changes to *Rickettsia conorii* infection.

Conclusion: Acute coronary syndrome could be an atypical presentation of rickettsial infection and its knowledge is pivotal for better patient care.

PP 013

A rare presentation of transient sinus bradycardia following consumption of concentrated Neem leaf extract

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Introduction: *Azadirachta indica* (Neem/Kohomba) is a widely used herbal plant with diverse clinical effects. Despite its use in traditional medicine, there is a paucity of scientific data on clinical outcomes. Bradycardia, arrhythmias, hypotension, coronary vasodilatation are the known cardiovascular effects of Neem extracts, which have been demonstrated only in small animal models. There have been a few cases of vomiting, seizures, Reye's-like syndrome, toxic encephalopathy and metabolic acidosis with acute toxicity of Neem extract in the literature.

Case Presentation: A 74-year-old Sri Lankan man, with a background of well-controlled hypertension and dyslipidaemia presented with abrupt onset of nausea, vomiting, two episodes of loose stools and central chest discomfort 30 minutes following consumption of a moderate amount of concentrated Neem extract. The patient was normothermic on examination with bradycardia of 40 bpm and blood pressure of 110/70mmHg. ECG revealed sinus bradycardia and his blood glucose, serum electrolytes, cardiac troponins, thyroid hormone profile were found to be normal. His 24-hour Holter monitoring did not reveal any abnormality. Bradycardia improved spontaneously within 30 minutes of admission with an uneventful recovery.

Conclusion: *Azadirachta indica* shows toxic effects with suprathreshold doses. In-depth knowledge is pivotal in toxicology for the management of acute intoxication of Neem extracts/derivatives. This case highlights the importance of knowledge on the dose-dependent cardiovascular effect of Neem extracts. Its potential therapeutic use in the management of cardiovascular diseases could be of interest for future research.

PP 014

Impact of COVID-19 outbreak on the number of invasive procedures in a cardiology unit at a tertiary care hospital in Sri Lanka –a descriptive longitudinal study

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Introduction: Covid-19 pandemic has significantly affected healthcare services worldwide with a similar impact on invasive cardiac procedures.

Objective: To analyse the impact of Covid-19 outbreak on therapeutic cardiology interventions, both elective and emergency, by comparing frequencies of procedures done during the initial affected year and immediate previous year.

Methods: A retrospective longitudinal descriptive study was carried out on frequencies of invasive therapeutic cardiology procedures from March 2019 to February 2021 at a Cardiology Unit in Sri Lanka. Pre-formed data collection sheets were filled using hospital registries.

Results: Total number of procedures done in the affected year was 4690 compared to 6096 in previous year. In April 2020, which was the most affected month, 52 cumulative procedures have been done in comparison to 427 procedures in April 2019. By August 2020 number of procedures have increased to 668 in comparison to 486 in August 2019. Total of elective procedures were 3751 and 5061 in affected and non-affected years respectively. Similarly, the number of emergency procedures were 1035 in immediate previous year and 939 during the COVID pandemic.

Conclusion: Study has highlighted a significant impact on invasive therapeutic cardiology procedures, especially on electives, by the onset of the COVID-19 pandemic, especially during the period of lockdown. However there has been a compensatory increase in procedures once lockdown was over, partially compensating for the numbers.

PP 015

An audit on indications for permanent pacemaker implantation at a tertiary care hospital in Sri Lanka from 2018 – 2020

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Introduction: 2018 American College of Cardiology(ACC)/American Heart Association (AHA)/ Heart Rhythm Society(HRS) guidelines help to improve the decision making process for pace maker implantation.

Objective: To detect any existing gap between the current practice of the institution and the latest evidence-based standards by analysing the appropriateness of pacemaker (PPM) prescription and proper selection of the chamber of pacing.

Methods: A retrospective study was done based on the patients who had undergone first PPM implantation from 2018 to 2020. The Data was collected from PPM registries and ward records. Data was recorded on information sheets and analysed using SPSS v.25.

Results: Total population was 1160 (51.7% female). Mean age was 67.25 years. Most frequent indications for pacing were AV conduction defects (52.2%) followed by sick sinus syndrome (SSS) (42.8%). Single Chamber Ventricular pacing (VVI) was done in 73.4% while Single Chamber Atrial pacing was done in 7% and Dual Chamber pacing in 19.7%. Majority (56.8%) with SSS had VVI pacing. The analysis identified 162 cases of ventricular pacing which deviated from the guideline. Unawareness of the guideline recommendations was identified as the main reason for this deviation.

Conclusion: This audit has shown similar demographics and pacemaker indications in the study population, compared to world literature. A higher number of unnecessary ventricular pacing were detected which highlighted the necessity of implementing relevant strategies in pacemaker implantation.

PP 016

A survey on laboratory report tracing practices at a tertiary-care hospital as an initiative to introduce computer-based report viewing

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Introduction: At Sri Lankan Government Hospitals, validated reports are printed and sent to respective units, accounting for delays in post-analytical decision making.

Objective: To evaluate current report tracing practices of clinical staff at a tertiary-care hospital, their acceptance, and infrastructure availability for a computer-based system.

Methods: A total of 190 doctors and nurses representing 40 units at the hospital participated in a survey before and after introducing computer-based report viewing.

Results: Respondents were mainly from medical (27%), surgical (25%), paediatric(12%) and acute-care units (17%). Before introducing a computer-based system, most (94%) contacted the laboratory via-phone/ in-person to trace urgent/ missing reports daily, and the average time taken to trace a report was 18-20 minutes. Although 95% agreed that computer-based report viewing would improve turn-around time, lack of infrastructure (computers, network) allowed introducing a computer-based system only in 21 units. Units lacking infrastructure were given the opportunity to use personal mobile devices of the staff to access the system. After introducing the computer-based system, all house officers (n=31) resorted to using computer-based report viewing and average time taken to trace a report reduced to <1 minute.

Conclusion: Healthcare professionals spend a significant amount of time tracing laboratory reports during their daily practice. Computer-based report viewing significantly reduced turn-around time of laboratory test by reducing post-analytical time. Authors suggest using a password-protected computer-based system accessible via both computers and mobile devices to reduce time taken to access reports during post-analytical phase.

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