67th Myanmar Medical Conference

Myanmar Medical Association
Yangon, Myanmar
23rd - 25th January, 2021
အလုပ်ချီးမှော်ခြင်းတွင်

(1) အုပ်ချုပ်ရေးအရေးကြီး ကျန်ရှိခြင်းများကို လိုအပ်ရန် အလွန်ချင်းချင်း စီးပွားရေး ပြုလုပ်နေသော စီမံကိန်းပါး
(2) အုပ်ချုပ်ရေးအရေးကြီး ကျန်ရှိခြင်းများကို လိုအပ်ရန် အလွန်ချင်းချင်း စီးပွားရေး ပြုလုပ်နေသော စီမံကိန်းပါး
(3) အုပ်ချုပ်ရေးအရေးကြီး ကျန်ရှိခြင်းများကို လိုအပ်ရန် အလွန်ချင်းချင်း စီးပွားရေး ပြုလုပ်နေသော စီမံကိန်းပါး
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“အလုပ်ချုပ်ရေးအရေးကြီး ကျန်ရှိခြင်းများကို လိုအပ်ရန် အလွန်ချင်းချင်း စီးပွားရေး ပြုလုပ်နေသော စီမံကိန်းပါး”
Dear colleagues

Welcome to our annual Myanmar Medical Conference. More than 60 conferences have been held, over the past 71 years, mostly in Yangon and in some state and region capitals. This time it will be held online. The year 2020 has seen unprecedented events as a consequence of the Covid-19 pandemic. The 67th Myanmar Medical Conference will go down in history as the first virtual medical conference in Myanmar. Surely it will not be the last virtual one.

The agenda in this conference are mostly academic. Social events like sports, dinners and in-person networking, a hallmark of previous conferences, will surely be missed. But the organizers have tried their best to make sure that the virtual platform is user friendly, and I am sure you will enjoy it. The academic programs, on the other hand, more than compensate the absence of the other social events. They are absolutely of the best quality.

For many years the need to invest in health systems has been advocated to many leaders, governments and the public. The Covid-19 pandemic has proved that robust and efficient health systems are equally as important as a good political system, a strong economic infrastructure and a modern education system for the socioeconomic development of all mankind.

One of the main tasks, as well as good traditions of the Myanmar Medical Association is to hold academic activities regularly. These academic activities are most important for the continuing professional development of our medical doctors. CPD is necessary for all doctors since medical science and practice of medicine is advancing rapidly. The events of last year highlighted that we will be faced with new challenges very often and doctors need to be ready to acquire new knowledge and skills all the time. Members of Myanmar Medical Association has readily adapted to this challenge, Zooming in whenever necessary.

This medical conference is aimed to provide everybody a chance to learn more, reinforce research work, keep a very good tradition going strong and polish your online skills.

With best wishes,
Professor Htin Aung Saw
President
Myanmar Medical Association
It is our honor to welcome the participants to this momentous academic event of the Myanmar Medical Association. As we all know, 2020 has been a very difficult time for all of us due to Covid-19 pandemic. The world has encountered unforeseen challenges which affected every aspect of our lives. There has been overwhelming brunt on the Health Care Professionals who are the front-line defenders in the battle against this deadly virus. However, as Continuing Professional Development has been the key to understand new knowledge and approaches on how to tackle with this new infection, the MMA has stepped up learning opportunities for its members in the ways and means appropriate for this time. Similarly for this 67th Annual Myanmar Medical Conference, the Organizers have exhaustively planned to conduct the first ever Virtual Conference for the benefit of all the medical professionals from all corners of the country.

We have tried our best to accommodate 3 plenary sessions, 44 symposia as well as scientific paper and poster presentations. The theme of the conference, “Transforming Health Care Strategies to address the needs of Covid-19 Pandemic”, has been very aptly chosen to meet the educational requirements for this unprecedented era. Many symposia and papers will deal with the perspectives relating to this new and emerging infection. Some of the highlights include, challenges and implications in treating pregnant women and children, managing patients with renal transplants and haematological disorders who acquired Covid-19 infection, new normal approaches in dealing with surgical conditions, perspectives on preventive measures and community engagement during the Covid era. As covid-19 has dominated almost the whole of the medical scene in the past year there are too many related topics on this infection to be discussed in the 3 day conference. Hence, a one day virtual pre-conference symposium on Covid-19 has been organized on the 21st of January where public health and clinical facets will be discussed more in detail.

The academic program will also include symposia on up-to-date aspects on other major conditions that medical doctors face in everyday professional work such as Hypertension and Cardiovascular disorders, Diabetes and common Endocrine conditions, Gastroenterology as well as hepatitis and ever important infections like HIV and TB. You will notice that the program includes plenary sessions which are key note lectures on prime topics to appeal all the participants attending the conference. These include Covid-19 vaccination - the breakthrough technology, current status and Myanmar preparation for vaccination; Myanmar Eye Health - strategies dealing with treatment and prevention of blindness in different age groups and Doctors’ Journey - the reasons for motivating health professionals committed to this Noble Profession. Ever popular events like the Clinical Sessions and Clinico-Pathological Conference will also be key features as in the previous conferences.

Since the academic program will be running in parallel, it will not be possible to attend all the live-sessions during the 3 day conference. For the benefit of the participants, the program will be available for viewing at their convenient time for 6 months after the conference. To be free of technical glitches, please try and follow the suggestions given by the event managers and do test run well ahead of the scheduled time. We hope the participants will find this virtual conference educational and enjoyable.
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<td>10:00 - 11:30 am</td>
<td>Opening of Academic Sessions</td>
<td>Opening of Plenary Session (1)</td>
<td>Opening Ceremony</td>
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<tr>
<td>11:45 am - 12:45 pm</td>
<td>Symposium on Adrenal and Thyroid Disorders</td>
<td>COVID-19 Vaccine: Where are we now</td>
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<td>2:15 - 3:15 pm</td>
<td>Hypertension 2021</td>
<td>Redefinition of Distance Learning</td>
<td>Pulmonary Rehabilitation in Covid-19 Era</td>
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<td>4:45 - 5:45 pm</td>
<td>Overview of Transplant Recipients: Challenges in COVID Era</td>
<td>Update on Management of Diabetic-Kidney Disease 2021</td>
<td>Health System Strengthening through Quality Improvement of General Practice in Myanmar</td>
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<td>5:45 - 6:45 pm</td>
<td>Management of Atrial Fibrillation</td>
<td>Applying Guidelines in Clinical Practice</td>
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<td>Myanmar Eye Health: Stronger together</td>
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<td>Laparoscopic Surgery in COVID Era</td>
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<td>10:45 - 11:45 am</td>
<td>On ground situation in management of Colorectal Cancer during COVID era</td>
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<td>11:00 am - 12:00 pm</td>
<td>Current update on Non ST Elevation Acute Coronary Syndrome (NSTEMI/UAP)</td>
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<td>12:15 - 1:15 pm</td>
<td>Clinical Scenario on rational antibiotics prescription</td>
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<td>HCV cure and after</td>
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<td>Update on management of Hyperglycaemia: Aiming for Quality Care</td>
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<td>4:00 - 5:00 pm</td>
<td>Different perspectives on Osteoporosis</td>
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<td>Obstructive Airways Disease: Medical and Surgical Aspect</td>
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<td>11:00 am - 12:00 pm</td>
<td>Anosmia: Sense of hope</td>
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<td>12:15 - 1:15 pm</td>
<td>What's new in Gastroenterology</td>
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<td>1:30 - 2:30 pm</td>
<td>Changing Trends in Helicobacter Pylori</td>
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<td>Sharing experience of clinical and community engagement in Covid-19 Era</td>
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<td>4:00 - 5:00 pm</td>
<td>Update in SLE</td>
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<td>Consultative Haematology in Covid-19 Era</td>
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<td>A Doctor's Journey: Reason for Motivation</td>
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<td>9:45 - 10:45 am</td>
<td>Covid-19 and Haematology</td>
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<td>11:00 am - 12:00 pm</td>
<td>Major Pillars for management of drug resistance Tuberculosis</td>
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<td>12:15 - 1:15 pm</td>
<td>Exercise is Medicine: Exercise Prescription for Health</td>
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<td>1:30 - 2:30 pm</td>
<td>Clinical Session (1)</td>
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<td>6:15 pm</td>
<td>Best Paper and Best Poster Award Ceremony</td>
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<td>Closing Ceremony</td>
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<td>2nd Kyushu-Myanmar Medical Education Seminar</td>
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<td>Surgery Session</td>
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<td>2020 ESC Highlights</td>
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Organizing Committee

Chairman: Prof. Htin Aung Saw
Vice Chairman (1): Prof. Aye Aung
Vice Chairman (2): Prof. Mya Thida
Secretary: Dr. Kyaw Lynn
Joint Secretary: Prof. Khay Mar Mya
Treasurer: Prof. Yin Yin Sein
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Presidents of all societies of MMA

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Vice Chairman: Prof. Yin Yin Soe
Secretary: Prof. Kyaw Linn (Paed)
Joint Secretary (1): AP Dr. Naing Oo
Joint Secretary (2): Dr. Thein Thein Myint
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- Prof. Kyaw Linn  
- Prof. Mar Mar Kyi  
- Dr. Kyaw Lynn  
- Dr. Khine Soe Win  
- Dr. Win Zaw  
- Dr. Thein Thein Myint  
- Dr. Thar Htet Aung

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**Members**  
- Dr. Kyaw Lynn  
- Dr. VJ Kumar

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**Members**  
- AP. Dr. Naing Oo  
- MMA Office Staff

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**Vice Chairman**  Prof. Yin Yin Soe  
**Secretary**  Dr. Thein Thein Myint

### Infection Prevention and Control Committee

**Chairman**  Prof. Mar Mar Kyi  
**Secretary**  AP Dr. Aung Kyaw Thu

### Secretariat Committee

- Dr. Kyaw Lynn  
- Dr. Win Zaw  
- Dr. Khine Soe Win  
- Dr. VJ Kumar  
- Dr. Tin Tin Hla
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<tr>
<td>10:00 AM - 11:30 AM</td>
<td><strong>Opening of Academic Sessions</strong>&lt;br&gt;<strong>Plenary Session 1 - Covid-19 Vaccine: Where are we now</strong>&lt;br&gt;(1) Breakthrough Vaccine Technology in the Era of Covid-19 - Prof. Kyi Kyi Thinn&lt;br&gt;(2) Current status of COVID-19 vaccines - Prof. Saw Win&lt;br&gt;(3) COVID-19 Immunization: Program Aspect - Dr. Htar Htar Lin</td>
<td>Dr. Khin Pyone Kyi</td>
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<td>11:45 AM - 12:45 PM</td>
<td><strong>Symposium A. 1 - Symposium on Adrenal and Thyroid Disorders</strong>&lt;br&gt;(1) Adrenal Disorders: Not as rare as you might think - Prof. Aye Aye Aung&lt;br&gt;(2) Clinical pearls in management of Thyroid nodule (endocrine perspective) - Dr. Kyar Nyo Soe Myint</td>
<td>Prof. Than Than Aye</td>
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<td>11:45 AM - 12:45 PM</td>
<td><strong>Symposium B. 1 - Early recognition and timely referral of speech and behavioral problems in children</strong>&lt;br&gt;(1) Common speech and behavioral problems in children - Dr. Nay Linn&lt;br&gt;(2) Approach to the child with speech delay - Dr. Aye Mya Min Aye&lt;br&gt;(3) Approach to a hyperactive child - Dr. Hnin Wint Wint Aung</td>
<td>Prof. Aye Maung Han&lt;br&gt;Prof. Kyaw Linn</td>
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Symposium (2) Track - A, B, C

11:45 AM - 12:45 PM Symposium C. 1 - Early Arthritis Clinic and Shared Care
Chairperson
Prof. Chit Soe
(1) Global Perspective on EAC - Dr. Yin Minn Soe
(2) Myanmar Perspective on EAC - Dr. Khin Thuzar Wynn

1:00 PM - 2:00 PM Symposium A. 2 - Hypertension 2021
Chairpersons
Prof. Ne Win
Prof. Myint Han
(1) Dance with Wolves in 2021 - Prof. Ye Myint
(2) Weighing Evidence in Hypertension Management - Prof. Abdul Rashid Abdul Rahman

1:00 PM - 2:00 PM Symposium B. 2 - Dealing with behavioural problems in children
Chairperson
Prof. Nyan Win Kyaw
(1) Behavioural problems in children - Dr. Thi Thi Aye
(2) Behavioural management in children - Dr. Nang Yu Yu Lwin
(3) Clinical practice of behavioral management in child and adolescent psychiatric clinic - Dr. Su Su Win

1:00 PM - 2:00 PM Symposium C. 2 - Update on Neuropathic Pain
Chairpersons
Prof. Myint Thaung
Prof. Win Min Thit
(1) Clinical perspectives of neuropathic pain - Prof. Myint Oo
(2) Evidenced based pharmacological treatment of neuropathic pain - Prof. Phyu Phyu Lay
(3) Rehabilitation perspective in management of neuropathic pain - Prof. Khin Myo Hla

Symposium (3) Track - A, B, C

2:15 PM - 3:15 PM Symposium A. 3 - CPC - One Autopsy case in COVID-19 crisis
Chairpersons
Prof. Aye Aye Myint
Prof. Aye Aye Gyi
A young lady with treated case of Aplastic anaemia - Dr. Yin Nwe Han, Dr. Htoo Thinzar Soe

2:15 PM - 3:15 PM Symposium B. 3 - Redefinition of Distance Learning
Chairpersons
Prof. Than Myint
Prof. Hla Yee Yee
(1) Distance Learning as an alternative to Face to Face Learning - Prof. Tin Tun
(2) Outcome based Distance Learning - AP Dr. Aung Kyaw Thu
(3) Redefinition of Distance learning - Prof. Chit Soe

2:15 PM - 3:15 PM Symposium C. 3 - Pulmonary Rehabilitation in Covid-19 Era
Chairpersons
Prof. Khin Myo Hla
Prof. Khin Saw Oo
(1) Assessment tools for Covid-19 patient in Pulmonary Rehabilitation - Dr. Soe Soe Khaing
(2) Principle of Pulmonary Rehabilitation in patient with Covid-19 - Prof. Khin Myo Hla
### Symposium (4) Track - A, B, C

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<tr>
<td>3:30 PM - 4:30 PM</td>
<td>Symposium A. 4 - Renal Transplant Recipients: Challenges in COVID Era</td>
<td>Prof. Khin Phyu Pyar, Prof. Khin Khin Win</td>
<td>Prof. Khin Phyu Pyar, Dr. Kyaw Thu Yein Lwin, Dr. Min Aung Hein</td>
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<td>3:30 PM - 4:30 PM</td>
<td>Symposium B. 4 - The Future of HIV</td>
<td>Prof. Rai Mra</td>
<td>Prof. Htin Aung Saw, Prof. Htun Lwin Nyein, Prof. Sabai Phyu</td>
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| 3:30 PM - 4:30 PM | Symposium C. 4 - Dealing with surgical emergencies in the era of Covid-19 | Prof. Shein Myint | (1) Dealing with Surgical emergency during Covid era (State Divisional Hospital) - Prof. Moe Myint  
(2) Emergency surgery in Covid era - AP Dr. Nay Aung Htun |

### Symposium (5) Track - A, B, C

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| 4:45 PM - 5:45 PM | Symposium A. 5 - Overview of Management of Atrial Fibrillation | Prof. Nwe Nwe | (1) Overview of Management of Atrial Fibrillation - Prof. Nwe Nwe  
(2) Current Approach for Stroke Prevention in Atrial Fibrillation - AP Dr. Thet Lel Swe Aye |
| 4:45 PM - 5:45 PM | Symposium B. 5 - Update on Management of Diabetic Kidney Disease 2021: Applying Guidelines in Clinical Practice | Prof. Aye Aye Aung | (1) Guidelines on DKD Management - AP Dr. Mg Mg Thant  
(2) Practical Management of DKA with Case Scenarios - Prof. Ko Ko |
| 4:45 PM - 5:45 PM | Symposium C. 5 - Health System Strengthening through Quality Improvement of General Practice in Myanmar | Dr. Myint Oo, Dr. Helen Crawley | (1) Health System Strengthening through Quality Improvement in General Practice - Dr. Sonny Tin Tun Aung  
(2) RCGP Quality Improvement Project in Myanmar - Dr. Peter Saunders  
(3) Demonstration of Quality Circle; Discussion on Significant Event Analysis - Dr. Tun Min Than, Dr. Myint Zaw, Dr. Tun Aung Kyaw  
(4) Demonstration of Quality Circle: Discussion on Clinical Audit - Dr. Sandar Hlaing, Dr. Ma Aye Kyi, Dr. Khin Soe |
Day 2
24th January, 2021 (Sunday)

8:00 AM - 9:30 AM Plenary Session 2 - Myanmar Eye Health: Stronger Together
Chairperson
Prof. Yee Yee Aung
Panelists: (1) Prof. Khin Ohnmar Khine
(2) Dr. Maung Maung Myo Win
(1) Glaucoma and blindness - Prof. Hla Kaythi
(2) Diabetes, ARMD and blindness - AP Dr. Thazin Shwe
(3) Cornea blindness - Dr. Aye Chan
(4) Ocular Trauma and blindness - Dr. Thein Than Htike

9:45 AM - 10:45 AM Symposium A. 6 - Laparoscopic Surgery in COVID Era
Chairperson
Prof. Htun Oo
(1) Laparoscopic hernia surgery in COVID era - Dr. Alfred Allen Buenafe
(2) Changes in training of laparoscopic surgery during COVID era - Prof. Davide Lomanto
(3) Laparoscopic bariatric surgery in COVID era - Dr. Aung Myint Oo

9:45 AM - 10:45 AM Symposium B. 6 - Approach to Headache
Chairperson
Prof. Mi Mi Cho
(1) When to Worry? - Prof. Phyu Phyu Lay
(2) Management of Headache - Prof. Moe Moe Zaw
(3) Migraine Mimica - Dr. Pravin Thomas

9:45 AM - 10:45 AM Symposium C. 6 - Obstructive Airways Disease: Medical and Surgical Aspect
Chairperson
Prof. Tin Maung Cho
(1) Medical Aspect of Obstructive Airways Disease - Prof. Toe Sandar
(2) Surgical Aspect of Obstructive Airways Disease - Dr. Lian Chin

10:45 AM - 11:45 AM Symposium A. 7 - On ground situation in management of Colorectal Cancer during COVID era
Chairpersons
Prof. Moe Moe Tin
Prof. Thida Oung
(1) Should MIS surgery be abandoned during COVID - AP Dr. Foo Fung Joon
(2) New Articulation Instruments in colorectal surgery - Prof. Yoonsuk Lee
(3) Surgical practices of Colorectal Cancer among Myanmar Surgeons during COVID - Dr. Naing Lin Zaw

11:00 AM - 12:00 PM Symposium B. 7 - First Year Experience of Covid-19 infection in Pregnancy
Moderator
Prof. Aye Aung
Panel discussion
(1) Prof. Nwe Mar Tun
(2) Prof. Khin May Thin

11:00 AM - 12:00 PM Symposium C. 7 - Anosmia: Sense of hope
Chairperson
Prof. Maung Maung Khaing
(1) How to approach the Etiology of Anosmia - Dr. Thandar Win
(2) Diagnosis and Management of Anosmia - Dr. Aye Aye Lunn
(3) COVID related Anosmia - Dr. Htet Htet May Oo
<table>
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<tr>
<th>Time</th>
<th>Symposium (8) Track - A, B, C</th>
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<tbody>
<tr>
<td>12:00 PM - 1:00 PM</td>
<td>Symposium A. 8 - Current update on Non ST Elevation Acute Coronary Syndrome (NSTEMI/UAP)</td>
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<tr>
<td>Chairperson</td>
<td>Prof. Lwin Tin Aye</td>
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<td>(1) Update on NSTEMI - Dr. Zin Mar Mar Than</td>
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<td>(2) Practical Updated Management of NSTEMI - Dr. Kyaw Kyaw</td>
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<tr>
<td>12:00 PM - 1:00 PM</td>
<td>Symposium B. 8 - Primary and Secondary Prevention of Cervical Cancer</td>
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<tr>
<td>Chairperson</td>
<td>Prof. Mya Thida</td>
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<td>(1) Primary prevention of Cervical Cancer - AP Dr. Myint Myint Thin</td>
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<td>(2) Secondary prevention of Cervical Cancer - Prof. Aye Aye Tint</td>
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<th>Time</th>
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<tr>
<td>12:15 PM - 1:15 PM</td>
<td>Symposium C. 8 - What's new in Gastroenterology</td>
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<tr>
<td>Chairperson</td>
<td>Prof. Nyunt Thein</td>
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<td>(1) What's new in Gastroenterology - Prof. Thein Myint</td>
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<th>Symposium (9) Track - A, B, C</th>
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<tr>
<td>1:15 PM - 2:15 PM</td>
<td>Symposium A. 9 - Clinical Scenario on rational antibiotics prescription</td>
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<tr>
<td>Chairperson</td>
<td>Prof. Zaw Lynn Aung</td>
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<td>(1) Clinical Scenario on rational antibiotics prescription - AP Dr. Aung Kyaw Thu</td>
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<td>(2) Clinical Scenario on rational antibiotics prescription - AP Dr. Hein Yar Zar Aung</td>
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<th>Time</th>
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<tr>
<td>1:15 PM - 2:15 PM</td>
<td>Symposium B. 9 - Is Hepatocellular carcinoma curable?</td>
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<tr>
<td>Chairperson</td>
<td>Prof. Khin Maung Win</td>
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<td>(1) Pathogenesis of HCC and recent developments in the Treatment of HCC (with special emphasis on multi kinase inhibitors and immunotherapy) - Prof. Khin Maung Win</td>
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<td>(2) Safe surgery to save patients with HCC - Prof. Shein Myint</td>
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<tr>
<td>1:30 PM - 2:30 PM</td>
<td>Symposium C. 9 - Changing Trends in Helicobacter Pylori</td>
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<tr>
<td>Chairperson</td>
<td>Prof. Thein Myint</td>
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<td></td>
<td>(1) Epidemiology and diagnosis update of H. Pylori - Dr. Swe Mon Mya</td>
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<td>(2) H. Pylori management update - Prof. Moe Myint Aung</td>
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</table>
### Symposium (10) Track - A, B, C

#### 2:30 PM - 3:30 PM
**Symposium A. 10 - HCV cure and after**

**Chairperson**
Prof. Khin Maung Win

1. How to maximize HCV cure - Prof. Win Naing
2. HCV treatment in special population - Prof. Kyaw Soe Tun
3. Should we take surveillance after HCV cure - Prof. Naomi Khaing Than Hlaing
4. Achieving HCV elimination in Myanmar - Prof. Win Win Swe

#### 2:30 PM - 3:30 PM
**Symposium B. 10 - Diabetic Foot**

**Chairpersons**
Prof. Myint Thaung
Prof. Khin Maung Myint

1. Medical Management of Diabetic Foot - Prof. Moe Wint Aung
2. Risk Factor for Amputation - AP Dr. Chan Mya Ohn
3. Orthopaedic Management for Diabetic Foot - AP Dr. Soe Thant

#### 2:45 PM - 3:45 PM
**Symposium C. 10 - Sharing experience of clinical and community engagement in Covid-19 Era**

**Chairpersons**
Prof. Mya Thida
Prof. Mar Mar Kyi

1. Community Participation - Prof. Mar Mar Kyi
2. Clinical Experience - Dr. Nay Myo Aung

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### Symposium (11) Track - A, B, C

#### 3:45 PM - 4:45 PM
**Symposium A. 11 - Update on management of Hyperglycaemia: Aiming for Quality Care**

**Chairperson**
Prof. Tint Swe Latt

1. Management of Hyperglycaemia: Improving Health Outcomes - Prof. Ye Myint
2. Management of Hyperglycaemia: Ensuring Safety - Prof. Thein Myint

#### 3:45 PM - 4:45 PM
**Symposium B. 11 - Challenges and implication of Covid-19 infection in children**

**Chairpersons**
Prof. Ye Myint Kyaw
Prof. Ei Phyu Lwin

1. Challenges and implication of Covid 19 infection in Neonate - Prof. Nant San San Aye
2. Challenges and implication of Covid 19 infection in Children - Dr. Saw Thet Khaing
3. Challenges in Pediatric Surgery during Covid 19 era - Dr. Nway Nway Thin Aung

#### 4:00 PM - 5:00 PM
**Symposium C. 11 - Update in SLE**

**Chairperson**
Prof. Chit Soe

1. Myanmar Rheumatology Society SLE Treatment Guideline Update - Prof. Hlaing Mya Win
2. Pitfalls in Management of SLE - Prof. Cho Mar Lwin
### Symposium (12) Track - A, B, C

**Symposium A. 12 - Different perspectives on Osteoporosis**

**Chairperson**

Prof. Khin Maung Myint

- (1) Osteoporotic Hip Fractures - Prof. Si Thu
- (2) Osteoporotic Vertebral Fractures - AP Dr. Thant Zin Naing
- (3) Medical Management of Osteoporosis - Prof. Moe Wint Aung

**Symposium B. 12 - Complications and Co-morbidities of Type 2 Diabetes: Triple Take trophy**

**Chairperson**

Prof. Khin Saw Than

- (1) Diabetes and Heart Failure - Dr. Yar Pyae
- (2) A Primer for De-prescribing in Type 2 Diabetes - Prof. Aye Aye Aung

**Symposium C. 12 - Consultative Haematology in Covid-19 Era**

**Moderator**

Prof. Aye Aye Gyi

**Panel Discussion**

- (1) Prof. Aye Aye Gyi
- (2) Prof. Aye Aye Khaing
- (3) AP Dr. Sein Win
- (4) AP Dr. Khin Thida Htut

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**Day 3**

25th January, 2021 (Monday)

**8:00 AM to 9:30 AM**

### Plenary Session 3 - A Doctor’s Journey: Reason for Motivation

**Chairperson**

Prof. Rai Mra

**Panel Discussion**

- (1) Prof. Rai Mra
- (2) Prof. Htin Aung Saw
- (3) Prof. Pe Thet Khin

**9:45 AM - 10:45 AM**

### Symposium A. 13 - Covid-19 and Haematology

**Chairperson**

Prof. Rai Mra

- (1) Covid-19: Is it a Haematological disorder? - Prof. Rai Mra
- (2) Current Opinion in Management of Adult ITP during COVID-19 Pandemic - Prof. Htun Lwin Nyein

**9:45 AM - 10:45 AM**

### Symposium C. 13 - 2nd Kyushu-Myanmar Medical Education Seminar - Endoscopy Session

**Chairpersons**

Prof. Zaw Wai Soe
Prof. Thein Myint
Prof. Tomohiko Moriyama

- (1) An Approach for Elimination of Gastric Cancer Death - Dr. Tomohiko Moriyama
- (2) How to detect Colorectal cancer - Dr. Takahisa Nagahata
- (3) Endoscopic management of bile duct stone - Dr. Nao Fujimori
Symposium (14) Track - A, B, C

11:00 AM - 12:00 PM Symposium A. 14 - Major pillars for management of drug resistant tuberculosis

Chairpersons
Prof. Tin Maung Cho
Dr. Win Maung

(1) Discarding the injection in the treatment of drug resistant tuberculosis - Dr. Zaw Myint
(2) A crucial role of laboratory in drug resistant tuberculosis management - Dr. Wint Wint Nyunt
(3) Role of aDSM in current drug resistant tuberculosis management - Dr. Thandar Thwin

11:00 AM - 12:00 PM Symposium B. 14 - Challenges of Evidence-based Medicine in time of Pandemic

Chairpersons
Prof. Hla Hla Win
Prof. Soe Moe Naing

(1) Challenges of Evidence-based Medicine in time of Pandemic - Prof. Win Khaing
(2) Challenges of Evidence-based Medicine in time of Pandemic - AP Dr. Kyaw Myo Tun

11:00 AM - 12:00 PM Symposium C. 14 - 2nd Kyushu-Myanmar Medical Education Seminar - Surgery Session

Chairpersons
Prof. Zaw Wai Soe
Prof. Htun Oo
Prof. Shuji Shimizu

(1) Tips and Pitfalls of Pancreatoduodenectomy - Dr. Kohei Nakata
(2) Advanced Gastric Cancer - What's the Standard Management? - Dr. Taiki Moriyama
(3) The Role of Metabolic Surgery to Treat Diabetes: Current Challenges and Perspectives - Dr. Eishi Nagai

12:15 PM - 1:15 PM Symposium A. 15 - Exercise is Medicine: Exercise Prescription for Health

Chairperson
Prof. Khin Mae Ohn

(1) Pre-participating Health Screening before Exercise Prescription - Dr. Ye Tint Lwin
(2) Exercise Recommendation for Health and Precautions for Safety Conducting Exercise Training - Prof. Ohnmar Myint Thein
(3) Exercise Prescription for Patients with Various Diseases - Prof. Khin Myo Hla

12:15 PM - 1:15 PM Symposium B. 15 - Management of Erectile Dysfunction

Chairpersons
Prof. Phone Myint
Prof. Min Thu

(1) Pathophysiology of Erectile Dysfunction - AP Dr. La Min Win
(2) Medical management of Erectile dysfunction - Dr. Pyae Phyo Kyaw
(3) Surgical Treatment for Erectile Dysfunction: Journey's End - Dr. Lin Aung Han

12:15 PM - 1:15 PM Symposium C. 15 - 2020 ESC Highlights

Chairperson
Prof. Than Than Kyaing

Panel Discussion
(1) Prof. Than Than Kyaing
(2) Prof. Kyaw Soe Win
# Clinical Sessions

## Clinical Session (Surgery)
**Chairperson**
Prof. Htun Oo

**Time**
1:30 PM - 2:30 PM

## Clinical Session (Medicine)
**Chairpersons**
Prof. Mar Mar Kyi
Prof. Khin Phyu Pyar

**Time**
2:45 PM - 3:45 PM

## Clinical Session (OG)
**Chairpersons**
Prof. Kyi Kyi Nyunt
Prof. Aye Aye Thein

**Time**
4:00 PM - 5:00 PM

## Clinical Session (Paediatrics)
**Chairpersons**
Prof. May Lwin
Prof. Nilar Lwin

**Time**
5:15 PM - 6:15 PM

## Best Paper and Best Poster Award Ceremony
Closing Ceremony

**Time**
6:15 PM
### 23rd January 2021 (Saturday)
#### Paper Presentations (1)

<table>
<thead>
<tr>
<th>Paper Presentation Hall</th>
<th>11:30 AM - 12:30 PM</th>
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<tbody>
<tr>
<td><strong>Chairpersons</strong></td>
<td>Prof. Yin Yin Soe</td>
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<td>Prof. San San Myint</td>
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<tr>
<td>11:30 AM - 11:45 AM</td>
<td>1. One-Step versus Two Step Treatment in High Grade Premalignant Cervical Lesion by Large Loop Excision of Transformation Zone</td>
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<td>Tin Zar Win, Win Mar Soe, Saw Kler Ku, Nwe Mar Tun, Thin Thin Myat</td>
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<td>11:45 AM - 12:00 PM</td>
<td>2. The effect of hysterolaparoscopy in female sub-fertility</td>
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<td>Zeyar Nyein</td>
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<td>12:00 PM - 12:15 PM</td>
<td>3. Perineal massage during labor on the frequency of episiotomy and perineal tear</td>
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<td>Khine Cherry Oo, May Hsu Aung, Khin May Thin, Saw Kler Ku, Kyi Kyi Nyunt</td>
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<tr>
<td>12:15 PM - 12:30 PM</td>
<td>4. Dydrogesterone versus Micronized Progesterone in Threatened Miscarriage</td>
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<td>Nay Nwe Aung</td>
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### 23rd January 2021 (Saturday)
#### Paper Presentations (2)

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<th>Paper Presentation Hall</th>
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<tr>
<td><strong>Chairpersons</strong></td>
<td>Prof. Shein Myint</td>
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<td>Prof. Moe Myint</td>
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<tr>
<td>12:45 - 1:00 PM</td>
<td>1. Colon Leakage Score for Predicting Risk of Anastomotic Leakage in Colorectal Surgery</td>
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<td>Honey Htun, Shein Myint, Tin May Saw</td>
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<tr>
<td>1:00 - 1:15 PM</td>
<td>2. Early Oral Feeding in patients with mild Acute Pancreatitis</td>
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<td></td>
<td>San Htoon Aung, Shein Myint, Maung Maung Zaw</td>
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<td>1:15 - 1:30 PM</td>
<td>3. <em>Helicobacter Pylori</em> infection in Non-Variceal Upper Gastrointestinal Bleeding</td>
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<td>Khine Su Kyi</td>
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<td>1:30 - 1:45 PM</td>
<td>4. Ultrasound-Guided Percutaneous Catheter Drainage in Liver Abscesses</td>
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<td>Ye Htet Aung</td>
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<td>1:45 - 2:00 PM</td>
<td>5. Effect of Tranexamic Acid on Seroma formation following Modified Radical Mastectomy</td>
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<td>The’ Nu Wai</td>
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<td>2:00 - 2:15 PM</td>
<td>6. Outcomes of Haemorrhoidectomy</td>
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<td>Kyi Kyi Han</td>
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### 23rd January 2021 (Saturday)  
**Paper Presentations (3)**

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<tr>
<td><strong>Paper Presentation Hall</strong></td>
<td>2:30 PM - 3:45 PM</td>
<td><strong>Prof. Kyu Kyu Maung</strong>&lt;br&gt;<strong>Prof. Nu Nu Aye</strong></td>
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<td><strong>Chairpersons</strong></td>
<td>Prof. Kyu Kyu Maung&lt;br&gt;Prof. Nu Nu Aye</td>
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<tr>
<td>2:30 - 2:45 PM</td>
<td>1. Serum Omega-6 to Omega-3 Fatty Acids Ratio and High Sensitivity C Reactive Protein (hs-CRP) Level in Obese Adults</td>
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<td>● Thet Thet Nwe, May Pyone Kyaw</td>
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<td>2:45 - 3:00 PM</td>
<td>2. Serum LCAT/CETP ratio in different categories of hyperlipidemia</td>
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<td>● Wai Lwin Han, May Pyone Kyaw</td>
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<td>3:00 - 3:15 PM</td>
<td>3. Effect of hydroxychloroquine on insulin sensitivity in established rheumatoid arthritis</td>
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<td>● Mg Mg Kyaw, Lwin Moe May, Shwe Su Mon, Cho Mar Lwin, Nu Nu Aye, Latt Latt Win</td>
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<td>3:15 - 3:30 PM</td>
<td>4. Antimicrobials Utilization Pattern and Sensitivity Profile of Patients admitted at Medical Ward, New Yangon General Hospital</td>
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<td>● Nyein Kay Khine, Khin Hnin Aye, Thida Tun, Kay Khine Thu, Nu Nu Aye</td>
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<td>3:30 - 3:45 PM</td>
<td>5. Vancomycin: The ratio of plasma trough concentration to minimum inhibitory concentration and microbiological outcome in haemodialysis patients with end stage renal disease</td>
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<td>● Nu Shwe Wah, Thida Tun, Mi Kun Kaw San, Nu Nu Aye</td>
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### 23rd January 2021 (Saturday)  
**Paper Presentations (4)**

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<tbody>
<tr>
<td><strong>Paper Presentation Hall</strong></td>
<td>4:00 PM - 5:00 PM</td>
<td><strong>Prof. Tin Moe Phyu</strong>&lt;br&gt;<strong>Prof. Thazin Mon</strong></td>
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<td><strong>Chairpersons</strong></td>
<td>Prof. Tin Moe Phyu&lt;br&gt;Prof. Thazin Mon</td>
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<tr>
<td>4:00 - 4:15 PM</td>
<td>1. Modified Downes Score for Assessment of Hypoxemia in Neonates with Respiratory Distress</td>
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<td>● Kay Khaing Tun, Thiri Toe, Tin Moe Phyu</td>
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<td>4:15 - 4:30 PM</td>
<td>2. Nutrition Risk Scores and Nutritional Status in Hospitalized Children</td>
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<td>● Than Htet Aung</td>
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<td>4:30 - 4:45 PM</td>
<td>3. Intestinal Worm Infestation in Pre-school Children with Gastroenteritis</td>
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<td>● Pann Ei Phyu, Win Thandar Shwe</td>
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<td>4:45 - 5:00 PM</td>
<td>4. Accidental Poisoning in Children admitted to Yankin Children Hospital</td>
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<td>● Thant Zin, Pike Htwe Cho, Khin Nyo Thein</td>
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### 24th January 2021 (Sunday)
#### Paper Presentations (5)

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<tr>
<td><strong>Chairpersons</strong></td>
<td>Prof. Aye Aye Myint</td>
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<td>Prof. Ne Win</td>
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</table>
| **9:30 - 9:45 AM**      | 1. Determination of APTT, Plasma Fibrinogen Level and Haemoglobin A1c Level in Type 2 Diabetes Mellitus  
                          |● Sai Than Htut Zaw, Swe Nwe Win, Myint Myint Nyein, Myat Mon |                    |
| **9:45 - 10:00 AM**     | 2. Immunoexpression of Matrix Metalloproteinase-9 (MMP-9) in Endometrial Adenocarcinoma  
                          |● Phyu Sin Nyein, May Thwe Lin, Khin Thida Aung, Myint Myint Nyein |                    |
| **10:00 - 10:15 AM**    | 3. A Study of Serum Thyroglobulin in Solitary Thyroid Nodule  
                          |● Wai Mar Myint Aung, Swe Zin Myint, Khin Thida Aung, Myint Myint Nyein, Myat Mon |                    |
| **10:15 - 10:30 AM**    | 4. Immunoexpression of Matrix Metalloproteinase-9 in Invasive Ductal Carcinoma Breast (No Special Type)  
                          |● Khin Mi Mi Kyaw, Su Sandar Ko Lay, Khin Thida Aung, Myint Myint Nyein, Myat Mon |                    |
| **10:30 - 10:45 AM**    | 5. Matrix Metalloproteinase-9 (MMP-9) Immunoexpression in Squamous cell carcinoma of cervix  
                          |● Phyoe Me Me Myint, Kay Thwe Oo, Khin Thida Aung, Myint Myint Nyein |                    |
| **10:45 - 11:00 AM**    | 6. Serum 25 Hydroxy Vitamin D Status in Patients with Multiple Myeloma  
                          |● Pan Ei Swe, Nu Thazin Win, Khin Thida Aung, Myint Myint Nyein |                    |

### 24th January 2021 (Sunday)
#### Paper Presentations (6)

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<th>Paper Presentation Hall</th>
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<td><strong>Chairpersons</strong></td>
<td>Prof. Thin Thin Nwe</td>
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<td>Prof. Nan Phyu Phyu Aung</td>
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| **11:15 - 11:30 AM**    | 1. Association between ABO blood types and severity of COVID-19 infection  
                          |● Soe Min Aung, Soe Win Hlaing, Di Wunn, Zarni Htet Aung, Nyan Lin Maung, Aung Phyo Kyaw, Tin Moe Mya, Khin Phyu Pyar |                    |
| **11:30 - 11:45 AM**    | 2. Factors associated with mortality in patients from outpatient heart failure clinic  
                          |● Zaw One, Kyaw Soe Win, Than Than Kyaing, Myint Ngwe, Khin Oo Lwin, Khin Maung Win, Tin Zaw Latt, Phone Ko Ko Soe, Thein Tun, Thandar, Chaw Thu Thu, Hlaing Thet Oo, Aye Thandar Aung |                    |
| **11:45 AM - 12:00 PM** | 3. Vitamin D Status and Diabetic Retinopathy in Patients with Diabetes Mellitus  
                          |● Kyaw Si Thu |                    |
| **12:00 - 12:15 PM**    | 4. Aspartate Aminotransferase/Platelet Count Ratio in Severity of Dengue Infection  
                          |● Htet Zaw Lin, Aye Soe Tun, Cho Cho Khine, Nay Myo Aung, Thin Thin Nwe |                    |
| **12:15 - 12:30 PM**    | 5. Study of urinary kidney injury molecules-1 and renal outcomes in viper bite patients  
<pre><code>                      |● Chan Ko Ko Win, Ye Ye Khine, Nay Myo Aung, Mar Mar Kyi, Thin Thin Nwe |                    |
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<th>Time</th>
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<td>12:45 - 1:00 PM</td>
<td>Monitoring Death by Neurological Criteria and identifying barriers for brain death diagnosis</td>
<td>Ohnmar, May Kyi Kyaw, Myat Kyaw, Moe Zaw Myint, Myat Mon Zin Thein, San Oo, Phyu Phyu Lay, Win Min Thit</td>
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<td>1:00 - 1:15 PM</td>
<td>Relationship between Nerve Conduction Study and Clinical Severity in patients with Carpal Tunnel Syndrome</td>
<td>Moh Moh Mon, Ya Min Kyaw, Moe Moe Zaw</td>
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<td>1:15 - 1:30 PM</td>
<td>Hypertriglyceridemia and Peripheral Neuropathy in HIV-infected patients</td>
<td>Min Thein Naing, Kyaw Swar Lin, Aye Aye Sann, Phyu Phyu Lay</td>
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<tr>
<td>1:30 - 1:45 PM</td>
<td>Fecal carriage of Carbapenem-resistant Enterobacteriaceae in selected community</td>
<td>Aye Mi San, Wah Win Htike</td>
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Background: Cervical cancer is most common cancer in developing countries and third most common cancer in the world. Because of long natural history, screening and intervention in premalignant lesion are highly effective.

Objectives: This study was randomized comparative clinical trial and aimed to compare two-step treatment and one-step treatment. Primary outcomes were success rate, overtreatment rate and effectiveness of two treatment groups.

Methods: Seventy-four women with high-grade premalignant lesion in Pap smear and colposcopy were randomly assigned into two groups. In one-step treatment group, LLETZ was performed immediately and cervical tissue was sent for histopathology. In two-step treatment group, colposcopic directed biopsy was done first and if high-grade lesion was diagnosed, LLETZ was carried out and tissue was sent for histopathology. Procedure related complications were detected and necessary treatment was given. Patient’s satisfaction was also evaluated. Recheck Pap smear was done at six months follow up. If non dyskaryosis was detected, it was regarded as successful treatment. If any dyskaryosis was detected, it was noted as treatment failure. Drop-out patients were also noted.

Results: Among study population, treatment success was detected in 72.7% (n = 24) in one-step group and 69.23% (n = 18) in two-step group. Overtreatment was 24.3% (n = 9) in one-step group and 33.3% (n = 11) in two-step group. Dropout rate was 10.8% (n = 4) and 29.7% (n = 11) in one-step and two-step treatment group respectively.

Conclusion: One-step treatment was as effective as two-step treatment in high grade premalignant cervical lesion. Therefore, one-step treatment is appropriate in low-resource countries.

Background: Simultaneous hysterolaparoscopy can identify both intrauterine and extrauterine abnormalities in female sub-fertility. Therapeutic interventions can also be provided in one setting.

Objective: The aim was to study the effect of hysterolaparoscopy in sub-fertile females.

Method: This hospital based descriptive and prospective study was done among 106 subfertile women at No.2 DSOGCH (300 bedded), Nay Pyi Taw during October, 2017 to December, 2019. Hysterolaparoscopy, chromopertubation and relevant operative interventions were performed under general anaesthesia. Successful pregnancy rate was observed during 9 months after interventions.

Results: Among 106 participants, 80 (75.5%) cases had primary sub-fertility. The mean age was 32.75 years and mean duration of sub-fertility was 4.02 years. Intrauterine pathologies 35 (33%) were detected by hysteroscopy. The most common extrauterine pathologies detected by laparoscopy were pelvic adhesions in 37 (34.9%), endometriosis in 36 (34%), polycystic ovaries in 24 (22.6%), proximal tubal blockage in 21 (19.8%), distal tubal blockage in 15 (14.1%), uterine fibroids in 13 (12.2%) and Fitz Hugh Curtis syndrome in 9 (8.5%) of cases. Successful hysterolaparoscopic tubal catheterization was done in 19 (17.9%) cases. The common laparoscopic interventions performed were 36 (34.0%) adhesiolysis, 26 (24.5%) cautierizations to endometriotic deposits, 53 (50%) ovarian drilling, 10 (9.5%) endometriotic cystectomies, 8 (7.5%) salpingostomies and 7 (6.6%) myomectomies. Accidental uterine perforation was found in 4 (3.8%) and conversion to laparotomy in 2 (1.9%) of cases. Total pregnancy rate after hysterolaparoscopy was 56.6%.

Conclusion: Hysterolaparoscopy should be considered as a safe, effective and reliable method in management of female sub-fertility.
**Perineal massage during labor on the frequency of episiotomy and perineal tear**

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Department of Obstetrics and Gynaecology, University of Medicine 2, Yangon

**Background:** Child birth and puerperium are important periods in women's life and can affect different aspects of their lives. Significant maternal morbidity including that related to pelvic floor function still continue to present in the worldwide.

**Objective:** To study the effect of perineal massage during first stage of labor on the frequency of episiotomy and perineal tear.

**Method:** Hospital-based randomized comparative study was done at Obstetrics Ward from 1st January 2017 to 31st December 2017. Eligible 80 cases of primigravidae and 80 cases of multi-gravidae women were recruited after exclusion. The proportion of episiotomy and perineal tear were compared between massage and non-massage groups.

**Results:** Frequency of episiotomy was 42.5% in the massage group and 97.5% in the control group in primiparous women and the difference was statistically significant (p < 0.001). In multiparae, episiotomy was done in 20% in the massage group and 57.5% in the control group and statistically difference was seen (p < 0.001). In primiparous women, first degree perineal tear was 83.3% and second degree perineal tear was 16.7% in the massage group and only one patient had second degree tear in the control group. In multiparous women, first degree perineal tear was 71.4% and second degree tear was 28.6% in the massage group. And in the control group, equal half of the participants had first and second degree tear.

**Conclusions:** A frequent cause of maternal morbidity related to child birth is perineal trauma - spontaneous or episiotomy-induced damage during delivery. This study concluded that perineum massage has a role in preventing episiotomy and serious perineal trauma during spontaneous vaginal delivery.

**Dydrogesterone versus Micronized Progesterone in Threatened Miscarriage**

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**Background:** Threatened miscarriage is a common complication in the first trimester of the pregnancy and it may cause stress and anxiety for childbearing women and her family about the future outcome of pregnancy. In the old days, threatened miscarriage was managed conservatively. Nowadays, progesterone plays an essential role for establishing and maintaining the pregnancy.

**Objective:** To detect the effectiveness of oral dydrogesterone versus oral micronized progesterone in continuing pregnancy of women with first trimester threatened miscarriage.

**Methods:** This study was hospital-based comparative study which was conducted at Central Women’s Hospital (CWH), Yangon. A total of 136 pregnant women, with symptoms of threatened miscarriage with single, viable fetus of 7-13 weeks gestation, were participated in the study. The participants were assigned into two groups after randomization: oral dydrogesterone (Group A) and micronized progesterone (Group B). The drugs were given to the participants and pregnancy outcomes were observed until delivery. Success of the treatment was continuing pregnancy beyond 22 completed weeks gestation.

**Results:** In dydrogesterone group, 83.8% of women continued pregnancy beyond 22 completed weeks gestation, and in micronized progesterone group, 76.5% of women continued pregnancy. The difference in success rate between two study groups was not statistically significant (p = 0.282). Regarding the side effects of progesterones, significantly higher percentage of women treated with micronized progesterone reported dizziness (p = 0.018).

**Conclusion:** In conclusion, oral dydrogesterone was as effective as micronized progesterone in continuing pregnancy in women with first trimester miscarriage.
Colon Leakage Score for Predicting Risk of Anastomotic Leakage in Colorectal Surgery

Honey Htun¹, Shein Myint², Tin May Saw³

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2. Professor & Head, Department of Surgery, University of Medicine, Mandalay
3. Professor & Head, Department of Surgery, University of Medicine, Taunggyi

Background: Surgical resection is the mainstay of curative treatment for the primary colorectal malignancies and some inflammatory bowel diseases. Anastomotic leakage (AL) after colorectal surgery is a major and potentially life-threatening complication. It increases postoperative morbidity, surgical mortality, duration of hospital stay. Anastomotic leakage typically becomes clinically apparent between the 5th and 8th post-operative day. If anastomotic leakage is detected earlier before obvious clinical signs, prompt and adaptive management can alter the prognosis of patient. However, clinical deterioration in early stage of anastomotic leakage is difficult to recognize. Many scoring systems and laboratory investigations were used to detect the early stage of anastomotic leakage. But major and life-threatening complication, the consequences of anastomotic leakage, still remains a problem.

Objective: The purpose was to study Colon Leakage Score for predicting risk of anastomotic leakage in colorectal surgery.

Methods: The study group was composed of 93 patients who were admitted to General Surgical Wards, MGH and MTH for colorectal surgery. The study period was from 1st November 2017 to 31st October 2018. Colon Leakage Score (CLS) was calculated using data from history, physical examination and intra-operative findings. The researcher observed the features of anastomotic leakage in each patient after colorectal surgery daily, until the patient was discharged from the hospital.

Results: A total of 93 colorectal disease patients were included in this study. There are 11 patients with CLS score of ≥ 11 and 82 patients with CLS score of < 11. Anastomotic leakage was experienced in 8 patients in which the CLS score of 5 patients is ≥ 11 and the others is < 11. The incidence of anastomotic leakage following colorectal surgery was 8.6 % (8 out of 93 patients) in this study. Among them, 62.5 % (5 out of 8 patients) of patients had scored ≥ 11 points and had anastomotic leakage. The patients who had anastomotic leakage had higher level of CLS scores than the patients who had no anastomotic leakage.

Conclusions: The results of this study showed that Colon Leakage Score ≥ 11 was significantly associated with the development of anastomotic leakage after colorectal surgery.

Early Oral Feeding in Patients with mild Acute Pancreatitis

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1. Specialist Assistant Surgeon, Surgical Unit (2), Mandalay General Hospital
2. Department of Surgery, University of Medicine Mandalay

Background: Acute pancreatitis is a very common disease in surgical practice. Most of the patients with mild acute pancreatitis are delayed in oral feeding because of the presence of abdominal pain.

Objective: To study early oral feeding in patients with mild acute pancreatitis.

Methods: 50 patients suffering from typical abdominal pain of acute pancreatitis, serum amylase more than 3 times the upper limit of normal and CRP not more than 130 mg/L at the time of admission were included in the study. All patients were given conventional treatment according to standard management. Early oral feeding was started from the time of diagnosis of mild acute pancreatitis. At first, clear liquid 100 ml was given 2 hourly from the mouth on admission day. On day 2, clear liquid 200 ml was given hourly from the mouth. On day 3, clear liquid adlib was given from the mouth. Early oral feeding was gradually increased to semisolid and a solid diet in stepwise as tolerated by the patient. After starting early oral feeding, time of first passage of flatus expressed by patients, occurance of vomiting, occurance of abdominal distension and length of hospital stay were assessed.

Results: 50 patients with mild acute pancreatitis were enrolled. 41 (82%) patients were male and 9 (18%) patients were female. Mean age was 41.9 ± 15.1. After early oral feeding, 1 (2%) patient experienced vomiting. 1 (2%) patient experienced abdominal distension. 43 (86%) patients passed flatus within first 24 hour while remaining 7 (14%) patient passed flatus within second 24 hour. Mean length of hospital stay was 3.5 ± 0.8 days.

Conclusions: Early oral feeding in patients with mild acute pancreatitis could enhance recovery and shorten hospital stays without increasing complication.
**Helicobacter Pylori infection in Non-Variceal Upper Gastrointestinal Bleeding**

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North Okkalapa General and Teaching Hospital, Yangon

**Background:** Non-variceal upper GI bleeding is a major problem encountered in daily surgical practice. Some studies have documented that *H. pylori* eradication in upper GI bleeding prevent recurrent bleeding. Although studies have documented that there is strong association of *H. pylori* with peptic ulcer and gastric cancer, there are variable results of the association of *H. pylori* with non-variceal upper GI bleeding.

**Objective:** To detect *H. pylori* infection in non-variceal upper GI bleeding.

**Methods:** Hospital based descriptive study and it was conducted at surgical wards of NOGTH over one year. Total of 75 patients with non-variceal upper GI bleeding who were confirmed on endoscopy were included in this study and CLO test was used for the detection of *H. pylori*. Demographic data of the patients, presence of *H. pylori* infection, causes of non-variceal upper GI bleeding and their relation between *H. pylori* were studied.

**Results:** *H. pylori* infection was present in 45 patients out of 75 study population (65.3%). Gastric erosion was the most common cause of non-variceal upper GI bleeding (54.7%). Antral gastric erosion was associated with *H. pylori* infection (p < 0.05). Remaining causes were duodenal ulcer (24%), gastric ulcer (9.3%), Ca stomach (4%). Association of *H. pylori* and other causes of non-variceal upper GI bleeding was not statistically significant (p = 0.08).

**Conclusions:** High prevalence of *H. pylori* infection was found among study population (65.3%). There was association of *H. pylori* with antral gastric erosion (p < 0.05). *H. pylori* should be tested in gastric erosion at the antral region. Association of *H. pylori* with other causes of non-variceal upper GI bleeding required further study with larger population.

**Key words:** *Helicobacter pylori*, non-variceal upper GI bleeding, CLO test

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**Ultrasound-Guided Percutaneous Catheter Drainage in Liver Abscesses**

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North Okkalarpa Teaching and General Hospital, Yangon

**Background:** Liver abscess is a common clinical problem in tropical countries. Over the last two decades, outcomes in patients presenting with liver abscesses have improved as a result of advances in radiological diagnosis and percutaneous treatment options.

**Objective:** To study the ultrasound-guided percutaneous catheter drainage in liver abscesses.

**Methods:** The study was conducted from August 2017 to August 2018 period. In the study, 33 patients with liver abscess were enrolled. After history taking and physical examination, ultrasound examination and CT abdomen were done. The percutaneous drainage with 12 Fr pigtail catheter was inserted with trocar and cannula method. Abscess cavity size was assessed every 2 days during catheter drainage. Follow-up patients were assessed with ultrasonography at 2nd week and 4th week after catheter removal. Hospital stay, cavity size reduction and outcomes were studied.

**Results:** Most of the patients with liver abscess had 50% reduction in abscess cavity at day 6. All the patients with amoebic liver abscess had 50% reduction in abscess cavity at 4 - 28 days (11.45 days + 7.46) whereas those with pyogenic liver abscess had 50% reduction in abscess cavity at 6 - 28 days (12 days + 10.71). All patients with liver abscess were discharged and cured and 1 patient got peritonitis (3.4%) and 1 patient encountered blocked catheter (3.4%). There was no morbidity and mortality in both pyogenic and amoebic liver abscess.

**Conclusions:** This study highlighted the clinical data and results of liver abscess and outcomes of percutaneous catheter drainage method. Although this was a small sample size study with short duration, it showed rapid improvement and good outcomes of percutaneous catheter drainage methods.
Effect of Tranexamic Acid on Seroma formation following Modified Radical Mastectomy

The' Nu Wai
Department of Surgery, University of Medicine (2) Yangon

Background: Breast Cancer is the most common cancer in women and the second cause of cancer related deaths worldwide. Surgery still has a central role to play in management of breast cancer. As seroma formation is the most common morbidity after surgery, several interventions have been reported. Recently, Tranexamic acid has been used systemically for controlling seroma formation by inhibiting fibrinolytic action of plasmin system in serum and lymph and has shown promising results.

Objective: To study the effect of Tranexamic acid on seroma formation following Modified Radical Mastectomy.

Methods: Hospital Based Comparative Study was conducted and IV Tranexamic Acid 500 mg 8 Hrly for 1 Day followed by PO Tranexamic Acid 500 mg TDS for 5 Days in Study Group.

Results: Seroma formation was found to be less in study group [2 patients (11.1%) Vs 4 patients (22.2%)]. Other post-op complications (haematoma, flap necrosis and wound infection) were comparable in both groups. Mean amount of wound drainage was significantly lower in study group from tumor bed (P value < 0.01) and from axillary fossa (P value < 0.01). Mean Duration of wound drainage was found to be lower in study group (P value < 0.05). Proportion of patients needed aspiration was higher in control group (P value < 0.01).

Conclusions: This study showed that age of patients, tumor and lymph node staging did not affect seroma formation. Patients who received Tranexamic acid had less wound drainage at both tumor bed and axillary fossa, less duration of wound drainage, required less aspiration. Therefore, Tranexamic acid may be used to reduce postoperative seroma formation following surgery for breast cancer.

Outcomes of Haemorrhoidectomy

Kyi Kyi Han
Specialist Assistant Surgeon, Surgical Ward, Magway General Hospital

Background: Hemorrhoids are usually managed by surgical haemorrhoidectomy which is associated with recurrence, stenosis, incontinence and delayed wound healing. Methods of surgical haemorrhoidectomy are opened, closed and stapled haemorrhoidectomy. In this study, these methods were studied for short term outcomes.

Objective: To study outcomes of Haemorrhoidectomy in Magway Region General Hospital and Magway Teaching Hospital

Methods: Hospital based cross sectional descriptive clinical study of all haemorrhoidectomy patients admitted to surgical ward of Magway Region General Hospital and Magway Teaching Hospital during one year period from 1st January, 2017 to 31st December, 2017 was performed.

Results: During one year study period, a total of 114 patients were enrolled. The most common complication was delayed wound healing (30 patients) which accounted for 26.3% of all operation. Bleeding was the second most common complications accounted for 3.5% of all operations. These two complications were occurred in opened haemorrhoidectomy. There was only one patient suffering stenosis in closed haemorrhoidectomy and no complications in stapled haemorrhoidectomy.

Conclusions: Haemorrhoid is a common disease affecting people of all ages and both sexes. Methods of haemorrhoidectomy changed during the last decades. The simple and versatile method is opened haemorrhoidectomy. Regarding the stenosis, closed haemorrhoidectomy is more complicated than others. Regarding the wound healing and bleeding, open haemorrhoidectomy was common. Stapled haemorrhoidectomy was safe but it had some limitations such as facility, long learning curve and cost.
Background: Obesity is one of the major public health problems and its comorbidities become public health challenges. Obesity, chronic low-grade inflammation, is induced by various pro-inflammatory cytokines and also linked to dietary specific fatty acids. In general, saturated fatty acids have pro-inflammatory effect and polyunsaturated fatty acids have anti-inflammatory and health promoting effects. But recent studies reported that all the PUFAs are not health promoting, omega-6 PUFA have pro-inflammatory actions. The present study aimed to investigate the association of serum omega-6 to omega-3 fatty acids ratio and high sensitivity C-reactive protein (hs-CRP) level in obese and non-obese adults.

Methods: The present study was a cross-sectional, comparative study and was conducted on total 60 subjects including both males and females aged 35-65 years from North Oakkalapa Township. Obese subjects and non-obese subjects were categorized by BMI ≥ 25 kg/m². This study was conducted to analyze the comparison of serum linoleic acid (LA), alpha linolenic acid (ALA), hs-CRP level and ratio of serum LA/ALA between obese and non-obese adults. It was also intended to find out the association between serum LA/ALA ratio and hs-CRP level in obese and non-obese adults.

Results: Among 60 subjects, the fasting serum hs-CRP level was significantly higher in obese group (6.88 ± 4.82 mg/L) than in non-obese group (2.28 ± 2.91 mg/L) (p < 0.0001). In comparison of LA/ALA ratio between two groups, obese groups (7.90 ± 3.68) was found to have slightly higher value than non-obese group (6.29 ± 3.94) but not statistically significant (p = 0.107). Serum LA/ALA ratio had weak positive correlation with serum hs-CRP level in obese group (r = 0.2984, p = 0.1092). There is significant association between abdominal obesity in term of waist circumference and serum LA/ALA ratio (p = 0.005).

Conclusions: Essential fatty acids ratio LA/ALA is positively associated with abdominal obesity in this study group. High LA/ALA ratio and weak positive correlation between LA/ALA ratio with serum hs-CRP level in obese group reflected that relatively higher level of ω-6 PUFA especially LA from vegetable oil might be responsible for low grade inflammation in obese people which could be possible independent risk factor for development of metabolic disorders.
Effect of hydroxychloroquine on insulin sensitivity in established rheumatoid arthritis

Mg Mg Kyaw, Lwin Moe May, Shwe Su Mon, Cho Mar Lwin, Nu Nu Aye, Latt Latt Win
Department of Pharmacology, University of Medicine, Taunggyi

Background: Rheumatoid arthritis (RA) is a chronic autoimmune inflammatory disease with a substantially elevated risk of insulin resistance. Recently, hydroxychloroquine (HCQ) used in RA treatment has been reported to have some beneficial effect on blood glucose and reduce the risks of type II diabetes mellitus.

Objective: To investigate the effect of hydroxychloroquine on insulin sensitivity in patients with established RA and to compare insulin sensitivity between study group and control group by using homeostatic model assessment of insulin resistance (HOMA-IR).

Methods: A randomized controlled experimental study of 12 weeks duration was done. Selected 50 established RA patients with low or moderate disease activity were randomly allocated into study group (n = 25) and control group (n = 25). Study group received standard treatment (methotrexate (MTX) or leflunomide (LEF) + prednisolone < 10 mg/day + one non-steroidal anti-inflammatory drug (NSAID)) with HCQ 200 mg whereas control group received standard treatment without HCQ for 12 weeks duration. Baseline disease activity score in 28 joints (DAS28-ESR) was calculated at the start of the study to select the patients. Fasting plasma glucose (FPG), fasting serum insulin (FSI) and HOMA-IR were measured and calculated before and after 12 weeks of treatment.

Results: In this study, the mean age of the patients was 46 years and 96% were females. The baseline DAS28-ESR, FPG, FSI and HOMA-IR showed no significant difference between two groups. In the study group, mean FPG was significantly decreased after 12 weeks of treatment, from 4.5 ± 0.2 mmol/L to 4.1 ± 0.5 mmol/L (p < 0.001). Although the study group showed more reduction in FPG from the baseline than that in the control group, the comparison between two groups after 12 weeks of treatment was not statistically significant (mean FPG were 4.2 ± 0.5 mmol/L in the study group and 4.3 ± 0.4 mmol/L in the control group, p = 0.6). After 12 weeks treatment, there was no statistically significant difference of mean FSI (7.9 ± 4.1 µU/mL versus 6.7 ± 3.8 µU/mL, p = 0.2) and mean HOMA-IR (1.3 ± 0.7 versus 1.4 ± 0.8, p = 0.5) between the study group and control group respectively.

Conclusions: Hydroxychloroquine 200 mg once daily as adjunct to the standard combination therapy showed no improvement of insulin sensitivity. Nonetheless, it had beneficial effect on reduction of FPG level even though there was no statistically significant effect on increasing insulin sensitivity. Therefore, the use of HCQ had a favorable effect on blood glucose in patients with established RA.

Key words: Hydroxychloroquine, insulin sensitivity, rheumatoid arthritis

Antimicrobials Utilization Pattern and Sensitivity Profile of Patients admitted at Medical Ward, New Yangon General Hospital

Nyein Kay Khine, Khin Hnin Aye, Thida Tun, Kay Khine Thu, Nu Nu Aye
General Practitioner

Background: Drug utilization is important for every drug but especially for antimicrobials as they are widely used drugs in health care. Utilization of antimicrobials is varied even in the same country. Rational use of antimicrobials is important not only for cost, effectiveness and safety but also for emergence of resistance.

Objective: To determine the utilization patterns of antimicrobial agents and to describe common organisms isolated in culture and their antibiotics sensitivity profile.

Methods: Hospital based descriptive study was carried out for 3 months from 15th May, 2019 to 15th August, 2019 admitted to medical ward of New Yangon General Hospital who were prescribed antimicrobial therapy by clinician. Data collection for each patient was done from the time of admission to the time of discharge or from the start of antimicrobial treatment to the end of antimicrobial treatment during their hospital stay. The patient who had undergone culture and sensitivity test were also be recorded from laboratory report. Data were entered into Microsoft excel work sheet and/or Statistical Package for the Social Science (SPSS) software version 16.0.

Results: Total utilization of antimicrobial agents by DDD/1000 inhabitants/day and DDD/100/bed days were 37.9 and 48.3, respectively. The most prescribed antimicrobial agents were combination of amoxicillin and b-lactamase inhibitor (4.4 DDD/1000 inhabitants/day and 5.6 DDD/100/bed days). DU 90% segment of the present study included 20 antimicrobials. Regarding sensitivity patterns of Staphylococcus aureus, it was highly sensitive to linezolid, vancomycin, ciprofloxacin. Regarding antimicrobials resistant pattern of Staphylococcus aureus, it was resistant to ofloxacin and cephalaxin.

Conclusion: The study provides valuable information to health care provider and policy maker for implementation of further hospital antibiotic guidelines. It will also provide useful information in the decision of drug procurement and estimation of drug budget.

Keywords: Drug utilization, Antimicrobials agents, DDD
Vancomycin: The ratio of plasma trough concentration to minimum inhibitory concentration and microbiological outcome in haemodialysis patients with end stage renal disease

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Background: Vancomycin is the mainstay treatment for methicillin resistant Staphylococcus aureus (MRSA) infection which also has the wide spectrum of activity for Gram (+) bacteria. The trough concentration of vancomycin (CTrough) is the most practical method for therapeutic monitoring of vancomycin. The recommended CTrough level of vancomycin is 15-20 mg/L while that of the acceptable range is 5-20 mg/L. CTrough level of vancomycin less than 10 mg/L is associated with the development of resistant strains whereas that of above 20 mg/L is associated with acute nephrotoxicity.

Objective: To determine CTrough/MIC ratio of vancomycin and the microbiological outcome in haemodialysis patients with end stage renal disease.

Methods: The hospital-based observational study was done in 19 end stage renal disease patients undergoing haemodialysis twice weekly, who were prescribed IV vancomycin by the nephrologists for Gram (+) bacteremia. The HPLC-UV method was used to measure the CTrough level of vancomycin at the steady state concentration; immediately before the 3rd dose of vancomycin. The MICs of individual patients were obtained from the blood culture test before vancomycin administration. The microbiological outcome was evaluated by the blood culture test after completion of the 5th dose of vancomycin.

Results: Two patients had CTrough/MIC value < 5 (sub-therapeutic value), 5 patients had CTrough/MIC value within 5 to 20 (therapeutic value) 12 patients had CTrough/MIC value > 20 (supra-therapeutic value).

After completion of 5th dose of vancomycin, twelve patients had sterile blood culture result and seven patients had Gram (-) bacteremia which are not under the activity of vancomycin.

Conclusions: In this study, only five patients achieved therapeutic CTrough/MIC value. The remaining patients have either the possibility of resistant strains or the vulnerability of acute nephrotoxicity.

Therefore, this study proves that therapeutic monitoring of vancomycin is important to achieve the optimum clinical effectiveness in patients with end stage renal disease undergoing haemodialysis.

Modified Downes Score for Assessment of Hypoxemia in Neonates with Respiratory Distress

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Department of Paediatrics, University of Medicine, Magway

Background: Hypoxemia in neonates with clinical respiratory distress has a high mortality. Modified Downes score is used as an alternative to evaluate clinical respiratory distress if blood gas analysis or pulse oximeter is not available.

Objectives: To measure oxygen saturation by using a neonatal pulse oximeter in study group, determine the modified Downes score in neonates with respiratory distress and find out the validity of modified Downes score.

Methods: A cross sectional study was carried out on neonates with clinical respiratory distress hospitalized at neonatal units of Magway Regional Hospital and Magway Teaching Hospital. Oxygen saturation was determined by a pulse oximeter. Hypoxemia was defined as oxygen saturation less than SpO2 < 90% in full term neonates (> 37 week gestational age) and SpO2 < 88% in preterm neonates. Hypoxemia in neonates with clinical respiratory distress was assessed by using modified Downes score at the same time. The validity of modified Downes score in predicting hypoxemia was assessed by sensitivity, specificity, positive predictive value and negative predictive value.

Results: Total 130 neonates were evaluated. Modified Downes score had sensitivity (70%), specificity (95.45%), positive predictive value (73.68%) and negative predictive value (94.59%). Accuracy was (75.38%).

Conclusions: Each parameter in modified Downes score can easily be assessed by health care workers in resource limited area. Modified Downes score can be used as a clinical diagnostic means for assessing hypoxemia in neonates with clinical respiratory distress with (70%) sensitivity (95% CI 68.3% to 98.77%) and (95.45%) specificity (95% CI 74.35% to 89.27%).
Background: Early identification of nutritional depletion is essential in order to prevent malnutrition, especially hospital-acquired malnutrition along with its complications. Such an approach provides the opportunity to apply appropriate nutritional interventions, in the hope of preventing complications. Limited data was available so far about under-nutrition in hospitalized children.

Objective: To study the nutritional status and nutrition risk score (NRS) in children admitted to 550-bedded Children Hospital, Mandalay.

Methods: It was a hospital-based cross-sectional descriptive study. 2-12 year old children admitted to 550-bedded Children Hospital, Mandalay were enrolled and their demographic characteristics were identified. Measurement of weight and height and assessment of nutritional status was done at the time of admission. By interviewing their mothers using Nutrition Risk Score (NRS) questionnaires, hospitalized children were categorized into high (NRS > 6) and low risk (NRS 0-6).

Results: Among 300 hospitalized children included in the study, 90 children (30%) were underweight, 94 children (31.33%) were stunted and 160 children (53.33%) were wasted. According to NRS score, 140 children (46.67%) were in the low risk group and 160 children (53.33%) were in the high risk group. Underweight, stunting and wasting were all associated with high NRS score (p < 0.0001). Among the demographic characteristics, younger age (2-5 years), living in rural area were significantly associated with high NRS score, (X² = 11.4960, P = 0.003) and (X² = 16.2984, P < 0.0001) respectively. However, NRS score is independent of mother’s educational status and family income.

Conclusions: The proportion of under-nutrition was high in hospitalized children and NRS score is useful for identification of children at risk at the time of hospital admission.

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Background: More than 1.5 billion people or 24% of the world’s population are infected with intestinal parasitic infection worldwide. Myanmar is a hyper-endemic area for Ascarisis especially in the wet humid low-lands of the country. In Myanmar, parasitic infections are 26% of all infectious disease.

Objective: To find out the proportion of intestinal worm infestations in pre-school children with gastroenteritis and to find out the associated risk factors.

Methods: Pre-tested questionnaires were filled up by interviewing the care-givers. Care givers were explained how to collect stool samples and these samples were immediately sent to National Health Laboratory.

Results: In this study, among 100 children, 33% of children had worm infestations and 67% had no infestation. In saline wet mouth technique, Ascaris was found in 66.7%, Trichuris was found in 12.2%, Hookworm was detected in 9.1%, Enterobius was detected in 6.1% and other organisms were present in 9.1% of stool samples. Mixed organisms were found in 9.1% of stool samples. In modified Kato-katz method, Ascaris was found in 72.7%, Trichuris was found in 15.2%, Hookworm was detected in 6.1% of Enterobius was detected in 6.1% and other organisms were present in 9.1% of stool samples. Mixed organisms were found in 12.2% of stool samples. Regarding logistic regression analysis of socio-demographic, environmental and sanitary risk factors, low mother educational status, residence in peri-urban and hand washing after defecation were more significant risk factors in this study group.

Conclusions: This study suggested that regular deworming and reduction of risk factors were important for prevention of worm infestation. Therefore, health education should be given to the caregivers for reduction of risk factors.
Accidental Poisoning in Children admitted to Yankin Children Hospital

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**Background:** Poisoning is a significant global health problem but the extent is different from one country to another. Childhood poisoning is a major cause of morbidity in both developing and developed countries. Four times that of developed countries. The circumstances under which the poisoning happened and epidemiological grounds are totally preventable.

**Objective:** The study had attempt to describe socio-demographic characteristics, types and association between types and clinical outcomes of accidental poisoning admitted to Yankin Children Hospital.

**Methods:** Hospital-based cross-sectional descriptive study from 1st January, 2017 to 31st December, 2017. All children admitted for accidental poisoning to Yankin Children Hospital were study population except insects and animals’ bites and brought dead cases.

**Results:** There were 104 cases among 21,124 cases of total admission representing as 0.49%. The most common cause was due to taking medicines as 44 cases (44%). Only one case died, which was a case of kerosene poisoning.

**Conclusions:** The trend of accidental poisoning was rising in recent years because there were nearly 0.41% in 2014, 0.45% in 2015, 0.43% in 2016 and 0.49% in 2017 respectively of total admission. The most common cause was due to taking medicines as 44 cases (44%). Only one case died, which was a case of kerosene poisoning.

Determination of APTT, Plasma Fibrinogen Level and Haemoglobin A1c Level in Type 2 Diabetes Mellitus

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**Background:** Type 2 Diabetes Mellitus is a common metabolic disease complicated with micro and macro vascular complications. Good glycemic control can prevent atherothrombotic complications which is mainly determined by HbA1c. APTT and fibrinogen are potential biomarkers to detect atherothrombotic complications in diabetic patients. Shortened APTT and increased fibrinogen level can predict atherothrombotic complications in diabetic patients.

**Objective:** A cross-sectional descriptive study was done on APTT, fibrinogen and HbA1c level and to find out the association between APTT, fibrinogen and HbA1c in type 2 diabetic patients.

**Methods:** Blood samples were collected in appropriate anticoagulant tubes to estimate APTT, fibrinogen and HbA1c level in type 2 diabetic patients.

**Results:** In this study, 60 cases of type 2 diabetes mellitus were participated with median age 56 years, and male, female ratio is 1:3. Out of 60 cases, 46 cases (76.7%) were normal APTT, 13 cases (21.7%) were shortened APTT and 1 case (1.7%) was prolonged APTT. Among 60 cases, 44 cases (73.3%) have normal fibrinogen, 13 cases (21.7%) have increased fibrinogen and 3 cases (5%) have decreased fibrinogen. Regarding HbA1c, 27 cases (45%) have good glycemic control, 14 cases (23.3%) have moderate glycemic control and 19 cases (31.7%) have poor glycemic control. It was no statistically association between APTT and HbA1c (P > 0.05) and between fibrinogen and HbA1c (P > 0.05). In this study, there was no statistically shortened APTT and increased fibrinogen level in patients with poor glycemic control (P > 0.05).

**Conclusions:** It is hoped to get information regarding the use of APTT and fibrinogen in predicting the risk of atherothrombotic complications in type 2 diabetes mellitus. Although HbA1c tests are mainly used in clinical practice, APTT and fibrinogen tests are cheaper than HbA1c tests and are also suitable in rural area where is not available HbA1c measurements.
Immunoexpression of Matrix Metalloproteinase-9 (MMP-9) in Endometrial Adenocarcinoma

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Background: Matrix Metalloproteinase-9 (MMP-9), a proteolytic enzyme, the major contributor of tissue breakdown and reconstitution of extracellular matrix causing tumor invasion and progression of disease.

Objective: This study aims to determine MMP-9 immunoexpression in endometrial adenocarcinoma and its association with different histological types and grades.

Methods: Forty-one patients diagnosed with endometrial carcinoma admitted to Yangon Central Women’s Hospital within two years (2018-2019) were included. MMP-9 protein was analyzed immunohistochemically from paraffin-embedded tissues by using specific monoclonal antibodies.

Results: Out of 41 cases of endometrial adenocarcinoma, 85.4% (35/41) showed positive MMP-9 immunoexpression and 14.6% (6/41) showed negative immunoexpression. MMP-9 immunoexpression was seen in 84.2% (32/38) of endometrioid carcinoma and 100% (3/3) of non-endometrioid carcinoma. Positive MMP-9 immunoexpression was seen in 50% (4/8) of grade 1, 91.7% (22/24) of grade 2 and 100% (9/9) of grade 3 endometrial adenocarcinoma. Overexpression of MMP-9 was found in 77.8% (14/18) of tumors which were invading less than 50 percent of myometrium and 91.3% (21/23) of tumors which were invading more than 50 percent of myometrium. There was a statistically significant correlation between MMP-9 immunoexpression and histological grades (p = 0.004), but not with other clinicopathological parameters such as histological types (p = 0.614) and myometrial invasion (p = 0.377).

Conclusions: This study suggested that MMP-9 immunoexpression was increased in higher histological grades of endometrial carcinoma. The findings of this study indicated that immunoexpression of MMP-9 could predict the aggressiveness and prognosis of endometrial carcinoma. It is hoped to develop future use of effective and selective MMP inhibitors in treatment of endometrial carcinoma patients.

A Study of Serum Thyroglobulin in Solitary Thyroid Nodule

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Background: Solitary thyroid nodules (STN) were common among Myanmar people. Identification of predictors of malignancy is one of the most critical challenges in thyroidology. Thyroglobulin expression is a reliable specific indicator of the presence of thyroid epithelial cells, either benign or malignant. As the STN become malignant, there is increased in preoperative serum thyroglobulin level.

Objective: To find out the association between preoperative serum thyroglobulin and histological types of Solitary thyroid nodules.

Methods: Blood samples of STN patients were collected and preoperative serum Thyroglobulin level was measured by electrochemiluminescence method.

Results: In this study, 65 cases of STNs were participated. Among them, 45 cases were benign thyroid nodules and 20 cases were malignant thyroid nodules. The mean serum thyroglobulin level was 225.89 ng/ml with SD ± 208.96 ng/ml. The cut off value for this study was 187.5 ng/ml. Out of 45 cases of benign thyroid nodule, 35 cases (77.8%) had < 187.5 ng/ml and 10 cases (22.2%) had increased level of serum thyroglobulin ≥ 187.5 ng/ml. Out of 20 cases of malignant thyroid nodule, 3 cases (15%) had < 187.5 ng/ml and 17 cases (85%) had increased level of serum thyroglobulin ≥ 187.5 ng/ml. The study revealed that there was association between level of thyroglobulin and chance of malignancy in STN (p value < 0.05).

Conclusions: It can be concluded that elevated preoperative serum thyroglobulin level is associated with increased chance of malignancy. This study truly highlights that serum thyroglobulin might be used to predict the nature of STN and may support the clinicians for further management.
Immunoexpression of Matrix Metalloproteinase-9 in Invasive Ductal Carcinoma Breast (No Special Type)

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**Background:** Breast cancer is one of the most common female malignancies in Myanmar and it commonly causes disease progression, distant metastasis, cancer-related morbidity and mortality. MMP-9 is a proteolytic enzyme, major contributor of tissue breakdown and reconstitution of extracellular matrix causing destructive disease and tumor progression.

**Objective:** A cross-sectional descriptive study was done on 46 specimens of invasive ductal carcinoma breast (No Special Type) and aimed to determine MMP-9 immunoexpression and its association with modified Bloom and Richardson grading system and axillary lymph node status.

**Methods & Results:** Among 46 cases, 4.3% (2/46) were BR grade I, 58.7% (27/46) were BR grade II and 37% (17/46) were BR grade III. MMP-9 immunoexpression was determined by immunohistochemistry in which high immunoreactive score (≥ 5) of MMP-9 was seen in 100% (2/2) of BR grade I, 77.78% (21/27) of BR grade II and 88.24% (15/17) of BR grade III. Low IRS (< 5) was seen in 22.22% (6/27) of BR grade II and 11.76% (2/17) of BR grade III. It failed to show any association with histological grades (p = 0.539). Among 46 cases, 21 cases were axillary lymph node positive and 25 cases negative. High IRS was seen in 80.95% (17/21) and low IRS in 19.05% (4/21) of node positive cases. High IRS was seen in 84% (21/25) and low IRS in 16% (4/25) of node negative cases. It failed to show any association with axillary lymph node status (p = 1.000).

**Conclusions:** Further studies are recommended to confirm the association between MMP-9 immunoexpression and histological grades of IDC breast (NST).

Matrix Metalloproteinase-9 (MMP-9) Immunoexpression in Squamous cell carcinoma of cervix

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**Background:** Cervical cancer is one of the most common female malignancies in Myanmar. It shows extensive local tumor invasion and distant metastasis. Squamous cell carcinoma is the most common neoplasm of cervix. MMP-9 is a proteolytic enzyme which is major contributor of tissue breakdown and reconstitution of extracellular matrix causing destructive disease, tumor progression and widespread metastasis.

**Objective:** The objective of this study was to determine the association between MMP-9 immunoexpression & different histological grades in 55 cases of cervical squamous cell carcinoma.

**Methods:** This study was a cross-sectional descriptive study. MMP-9 immunoexpression was detected by Peroxidase-antiperoxidase method. Statistical analysis was done by SPSS 16. The association between MMP-9 immunoexpression & different histological grades of cervical squamous cell carcinoma was evaluated with ANOVA test.

**Results:** The mean age of the patients was 48 ± 12.72 years. Out of 55 cases, 7.5% were well differentiated, 78% were moderately differentiated and 14.5% were poorly differentiated. Minimum and maximum immunoexpression score was 1 and 9 in cervical squamous cell carcinoma. There was a statistically significant association between MMP-9 immunoexpression & different histological grades of cervical squamous cell carcinoma (p = 0.000). This study revealed that increased MMP-9 immunoexpression found in high histological grades.

**Conclusion:** It implicated that correlation of positive MMP-9 immunoexpression and tumor aggressiveness. MMP-9 immunoexpression should be tested to predict disease severity and treatment with adjuvant chemotherapeutic agents, MMP-9 inhibitors in cervical cancer.
**Serum 25 Hydroxy Vitamin D Status in Patients with Multiple Myeloma**

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**Background:** Multiple Myeloma (MM) is frequently complicated by skeletal complications such as lytic bone lesions, related bone pain and spinal cord compressions. These complications are major cause of morbidity and mortality in MM. Vitamin D regulates skeletal metabolism and controls the critical cellular processes such as inhibition of carcinogenesis. Vitamin D deficiency leads to increased skeletal catabolism and affects the tumor metabolism.

**Objective:** To find out the association between vitamin D status and different stages of multiple myeloma.

**Methods:** Hospital-based cross-sectional analytical study was performed on 37 multiple myeloma patients. Serum vitamin D level was measured by electrochemiluminescence method.

**Results:** Among 37 patients, 18.9% (7/37) were in International Staging System (ISS) stage I, 51.4% (19/37) were in stage II and 29.7% (11/37) were in stage III. Regarding the results of vitamin D levels, 75.7% (28/37) were in vitamin D deficiency and 24.3% (9/37) were in normal vitamin D level. 100% (7/7) of stage I was within normal vitamin D levels. 89.5% (17/19) of stage II and 100% (11/11) of stage III were in vitamin D deficient state. The highest mean of vitamin D level was observed in stage I (38.32 ± 2.86) and lowest level in stage III (16.94 ± 3.22). There was statistically significant difference of vitamin D status among different stages of multiple myeloma (p = 0.000).

**Conclusions:** Association of vitamin D deficiency with higher ISS stage of multiple myeloma suggested that vitamin D deficiency might be considered poorer outcome in multiple myeloma. It may be hoped to support the clinicians for further management.

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**Association between ABO blood types and severity of COVID-19 infection**

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**Background:** ABO blood types may affect risk of severe COVID-19 infection and its mortality.

**Objective:** To assess the association between ABO blood types and severity and death of COVID-19 infection.

**Method:** Hospital-based, cross-sectional analytical study was done at military COVID-19 centers during September-November, 2020 among 428 patients. Their demographic data, ABO blood types and severity status by WHO criteria were collected and associations were analyzed by SPSS-22 statistical software.

**Results:** Among 428 patients, majority (73.1%) was younger than 60 years (Range = 12-100 years). Males were predominant (75%). Seventy-eight (18.2%) patients suffered severe form and 89 (20.8%) patients had comorbidities. Blood group O was the commonest - 31.1% (133/428) followed by B - 28.3% (121/428) and A - 26.9% (115/428). The lowest group was AB - 13.8% (59/428). The severity of COVID-19 infection was statistically significantly associated with old age > 60 years (p = < 0.001), male sex (p = < 0.001) and more numbers of comorbid diseases (p = < 0.001). The blood group B was likely to have higher risk (OR = 1.24, 95%CI = 0.7-2.1, p = 0.4) and the remaining had relatively low risk; blood groups A (OR = 0.7, 95%CI = 0.4-1.3, p = 0.3), group O (OR = 0.796, 95%CI = 0.4-1.3, p = 0.4), AB (OR = 0.7, 95%CI = 0.3-1.6, p = 0.5) for severe infection. Among 78 patients with severe form, blood group B had largest proportion - 32.1% (25/78) while blood group AB had lowest - 11.5% (9/78).Among them, 19 cases expired. The highest mortality was seen in severe patients with group AB - 44.4% (4/9), followed by group O - 27.2% (6/22), group A - 22.7% (5/22) and group B - 16% (4/25).

**Conclusion:** Blood group B had higher chances to get severe COVID-19 infection. The highest mortality was seen in blood group AB. Larger studies are required to get stronger associations.
Factors associated with mortality in patients from outpatient heart failure clinic

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Background: Heart failure (HF) is one of major public health problems and associated with increased morbidity and mortality. Despite recent improvements in therapy of HF, prognosis of HF remains poor. Therefore, identification of the clinical factors influencing the mortality is important to improve outcomes in patients with HF.

Objectives: This study aimed to determine the factors associated with mortality in patients with chronic HF at outpatient HF clinic.

Methods: A retrospective analysis the records of 175 patients with HF who attended at outpatient HF clinic of Department of Cardiovascular Medicine, Mandalay between 2017 and 2020. The primary outcome was all cause mortality. Analysis was performed to identify the factors correlated to mortality in HF.

Results: A total of 175 patients were included. The mean age of was 57 ± 14 years, and 51% were male. Most of the patients had ischaemic and dilated cardiomyopathy (66% and 23% respectively). After a mean follow up of 3-year, mortality rate was 7.4%. After univariate analysis, age (p = 0.04; OR = 1.04; CI [1.0-1.1]), systolic blood pressure (SBP) (p = 0.03; OR = 1.96; CI [0.93-0.99]), diastolic blood pressure (DBP) (p = 0.01; OR = 0.93; CI [0.88-0.98]), chronic kidney disease (CKD) (p = 0.023; OR = 3.9; CI [1.2-12.7]), and angiotensin converting enzyme inhibitors (ACEIs) (p = 0.001; OR = 0.15; CI [0.47-1.0]) were associated with mortality.

Conclusion: Factors associated with mortality in HF were CKD, SBP, DBP and ACEIs. Use of ACEIs was shown to decrease mortality. Further well-designed studies with larger sample size are warranted to identify the factors predicting mortality of HF.

Vitamin D Status and Diabetic Retinopathy in Patients with Diabetes Mellitus

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Background: Diabetes mellitus is a serious metabolic disorder that has become increasingly prevalent imposing a large public health problem. Type 2 diabetes mellitus is irreversible and its microvascular and macrovascular complications result in poor life expectancy and poor quality of life. Diabetic retinopathy is the most common cause of blindness worldwide.

Objective: The aim of the present study was to study vitamin D status and diabetic retinopathy in patients with type 2 diabetes mellitus.

Methods: Hospital-based cross-sectional analytical study was carried out at General Medical Units, Outpatient Department and Diabetic Clinic of North Okkalapa General and Teaching Hospital and total 129 patients were included in this study. Serum vitamin D level was determined by enzyme-linked immunosorbent assay method (Stat Fax 2600 washer and Stat Fax 4200 reader) at common research laboratory of University of Medicine 2, Yangon and diabetic retinopathy was detected with the use of Welch-Allyn ophthalmoscope and confirmed by consultant ophthalmologist using retinal photograph.

Results: Mean age of the patients was 60.33 years ± 9.11 SD with the age range of 42 to 87 years and proportion of female patients was 57.4%. Pre-proliferative retinopathy (R2) was the commonest finding found in 45% of study population followed by Background retinopathy (R1) in 33.3% and Proliferative retinopathy (R3) in 21.7% of the patients. Mean serum vitamin D level was 21.60 ng/dl ± 8.08 SD and vitamin D deficiency (< 20 ng/ml) was seen in 48.1%. The present study showed that the mean values of vitamin D level became significantly lower with increasing severity of retinopathy (28.39 ng/dl in R1, 20.32 ng/dl in R2 and 13.81 ng/dl in R3 with p value of < 0.001).

Conclusions: Vitamin D is an independent predictor for the emergence and progression of diabetic retinopathy in patients with type 2 diabetes mellitus. Vitamin D supplementation and food fortification may be an essential part of the preventive measures in the future.
Aspartate Aminotransferase/Platelet Count Ratio in Severity of Dengue Infection

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Background: Myanmar is facing public health challenge with economic burden in dengue infection. With 5 year data based on VCBC program of Myanmar 2011-2015, 2,838 cases of confirm adult dengue require hospital admission and among them 19 cases died of dengue shock syndrome (severe dengue). It is hoped that it will be possible to predict the severe dengue disease and help to monitor clinically and sort with effective management.

Objectives: To study aspartate aminotransferase/platelet ratio index (APRI) in severity of dengue infection.

Methods: Using laboratory measurement of aspartate aminotransferase and platelet count, APRI = [AST (U/L)/upper limit of normal AST/PLT (× 10^9/L)] × 100 in non-severe DF (n = 53) and severe DF (n = 67) was calculated.

Results: Among transaminase level, the level of aspartate amino transaminase was normal in 24 patients (20%) and elevated in 96 patients (80%). Normal ALT level was found in 48 patients (40%) and elevated ALT level was found in 72 patients (60%). Three patients in this study died because of organ involvement as a result of severe dengue infection. The Receiver-Operator Characteristic (ROC) Curve for APRI score for the prediction of severe disease lied significantly above the 45 degree line of unity. The area under the ROC curve was 0.919 which denoting the excellent accuracy of the test. The best diagnostic cut-off point for APRI score level was 4.65 with the sensitivity of 85.1% and specificity of 90.6%.

Conclusion: This study suggested that the aspartate amino transaminase/platelet count ratio can predict clinical dengue disease severity in adult.

Study of urinary kidney injury molecules-1 and renal outcomes in viper bite patients

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Background: In Myanmar, snake bite is one of the priority health problems identified in the National Health Plan (2011-2016). According to health management information system of Department of Health Planning from Ministry of Health, the morbidity of snake bite in Myanmar was 11,547 in 2011 and 13,867 in 2012. Increase in creatinine and blood urea nitrogen occur only after substantial renal injury. Kidney injury molecules is one of the seven novel urinary biomarkers. It is a transmembrane protein and non-detectable in normal kidney and its expression was discovered in ischaemic and toxic acute tubular necrosis. The KIM-1 ectodomain can be cleaved and detected in urine and it was shown that cleaved KIM-1 ectodomain can be quantified and related to extent of renal damage.

Objective: To study urinary kidney molecules-1 levels and renal outcome in patients with Russell’s viper bite.

Methods: Urinary KIM-1 level are measured using ELISA method in patient with viper bite within 48 hours from the time since bite and renal outcomes are observed.

Results: 18 participants had developed AKI stage 3 according to KDIGO criteria. Increased urinary KIM-1 level had been observed in 16 (88.8%) of patients and 2 patients (11.2%) did not have increased urinary KIM-1 level. In 16 patients who had met KDIGO I and II staging, 10 patients (62.5%) had increased urinary KIM-1 level and 6 (37.5%) patients did not have increased urinary KIM-1 level. Mean KIM to creatinine value in patients with KDIGO 3 group were 3.69 ± 4.1 and 2.79 ± 1.6 in patients with KDIGO 1 and 2. Mean value of urinary KIM-1 level in non AKI group ANOVA Test, p = 0.002. Out of 12 patients who required RRT, 10 patients (83.3%) had increased KIM-1 level. Mean KIM-1 level in patient requiring RRT was 4.27 ± 2.1.

Conclusions: Nearly half of the patients with viper bite had complicated with AKI in this study. It was also found that there was statistically strong association between higher AKI staging and increased urinary KIM-1 level. Moreover, most patients (83.3%) who undergone renal replacement therapy had been shown to have increased urinary KIM-1 levels. High proportion of patients with adverse renal outcomes had increased urinary KIM-1 level. It will be helpful to measure urinary KIM-1 in patients with viper bite to detect adverse renal outcomes.
Paper presentation (7)

Monitoring Death by Neurological Criteria and identifying barriers for brain death diagnosis

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Background: Diagnosis of brain death is mainly clinical and is based on highly specific neurological examination of the patient.

Objective: To study the monitoring of death by neurological criteria and to identify the barriers for brain death diagnosis.

Methods: Consecutive probable and confirmed brain-dead cases in the main intensive care unit (ICU) and neurosurgical ICU of Yangon General Hospital were identified prospectively for 6 months from 20th February to 19th August 2020 and their inpatient admission records were studied to monitor what happened after defining as probable brain-dead cases, identifying the barriers to become confirmed brain death.

Results: A total of only 7 cases were recruited. Most common cause of brain dead was traumatic brain injury (TBI). Because of communicable diseases, nearly half of the cases were found unsuitable for organ donation. Nearly all cases were severe and admitted to ICU within 24 hours. Average observation period (8.9 ± 8.5 hours) was longer than stated in local guideline. All cases were off the ventilator only after circulatory arrest. According to the definition set in this study, all probable brain dead cases did not become confirmed brain death.

Conclusion: This study helped us understand the current hospital situation regarding brain-dead diagnosis and identified the causes for not being progressed to confirmed brain-death. Future solutions will be improving knowledge and expertise on brain death certification, proper documentation of brain death and increasing awareness of organ donation among health care providers.

Relationship between Nerve Conduction Study and Clinical Severity in Patients with Carpal Tunnel Syndrome

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Background: Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy which can threaten the function of the hand. Electrodiagnostic studies are being increasingly used to assess severity of CTS. Moreover, subjective sensory symptoms in patients with CTS are not always accompanied by objective findings.

Objective: To study the relationship between NCS and clinical severity in patients with CTS.

Methods: This study included 63 patients with CTS. The clinical severity was categorized as mild to moderate and severe groups, by using historical-objective (Hi-Ob) scale. Based on the findings of NCS, severity of CTS was classified as mild to moderate and severe groups. Then, the relationship between NCS and clinical severity was analyzed by Chi square test.

Results: The mean age was 50 ± 11.98 years with female to male ratio of 3.84:1. By clinical severity, 17 (26.99%) out of 63 patients were in mild to moderate group and 46 (73.01%) were in severe group. By NCS severity, 43 (68.25%) out of 63 patients were in mild to moderate group and 20 (31.75%) were in severe group. There was statistically significant relationship between NCS and clinical severity (p = 0.038). In mild to moderate clinical severity group, 88.24% were found to have mild to moderate NCS severity whereas only 39.13% of clinically severe group revealed severe NCS severity.

Conclusion: Historical-objective scale could be a useful tool in evaluation of severity of CTS in resource limited areas. Although Hi-Ob scale was well related with NCS in mild to moderate clinical severity, NCS remains important for confirming the severe clinical entity.
Hypertriglyceridemia and peripheral neuropathy in HIV-infected patients

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Background: In the era of highly active antiretroviral therapy and longevity, neurological complications such as peripheral neuropathy become important in the care of HIV-infected patients. Lipid abnormalities especially hypertriglyceridemia become probably an important risk factor for peripheral neuropathy in HIV infection. The association between hypertriglyceridemia and peripheral neuropathy was determined in the study.

Objective: To determine the association between hypertriglyceridemia and peripheral neuropathy in HIV-infected patients.

Methods: This study was a hospital-based cross-sectional analytical study conducted on 88 HIV patients. Patients who fulfilled selection criteria were chosen by using systemic sampling method. After taking informed consent, nerve conduction studies were done and blood triglyceride level was measured. Categorical variables were summarized in frequency and percentage and continuous variables were described in mean and standard deviation and compared using Independent Samples t test. Categorical variables were analyzed using Pearson's chi-squared test. Correlation analysis of the results was done using the cross tabs. Statistically significant level was determined at p < 0.05.

Results: In this study, among 88 patients, 82 patients (93.18%) were on 1st line ART regimen. 58 patients (65.9%) had hypertriglyceridemia. According to nerve conduction studies, 30 patients (34.1%) had features of axonal sensory and motor peripheral neuropathy. Mean values of parameters of abnormal nerve conduction findings were ulnar compound muscle action potential (CMAP) amplitude - 4.71 ± 2.11 mV (normal value - ≥ 6 mV), ulnar nerve motor velocity - 64.50 ± 7.88 m/s (normal value - ≥ 49 m/s), tibial compound muscle action potential (CMAP) amplitude - 8.14 ± 4.79 mV (normal value - ≥ 4mV), tibial nerve velocity - 47.09 ± 10.34 m/s (normal value - ≥ 41m/s), ulnar sensory nerve action potential (SNAP) amplitude - 12.25 ± 4.30 µV (normal value - ≥ 17 µV), ulnar sensory nerve conduction velocity - 60.74 ± 7.68 m/s (normal value - ≥ 50 m/s), sural sensory nerve action potential (SNAP) amplitude - 2.16 ± 1.29 µV (normal value - ≥ 6 µV) and sural conduction nerve velocity - 48.00 ± 10.33 m/s (normal value - ≥ 40 m/s). In upper limbs, motor nerves were more severely affected and in lower limbs, sensory nerves were more severely affected. The nerves affected were not symmetrical. In HIV-infected patients with peripheral neuropathy, the mean triglyceride level was 274 ± 127.59 mg/dL and in HIV-infected patients without peripheral neuropathy, the mean triglyceride level was 180 ± 111.31 mg/dL. P value was 0.0003 and statistically significant.

Conclusions: In the study, 58 patients (65.9%) of study population had hypertriglyceridemia and out of these 58 patients, 30 patients (51.17%) had peripheral neuropathy. The neuropathy was sensory and motor axonal neuropathy type, predominantly motor in upper limbs and predominately sensory in lower limbs. The association between hypertriglyceridemia and peripheral neuropathy was statistically significant with p value of 0.0003 but there was no statistically significant correlation between hypertriglyceridemia and each parameter of abnormal NCS findings. The peripheral neuropathy is the common complication in HIV infection and hypertriglyceridemia is also important lipid abnormality in these patients. There is strong association between hypertriglyceridemia and peripheral neuropathy in HIV patients.
Background: Bacterial resistance to carbapenem group represents one of the significant global health challenges of this century. This is particularly important in developing countries, where antibiotics are often available over the counter, (without the need for a prescription). There has been little research published exploring fecal carriage of carbapenem-resistance Enterobacteriaceae in any asymptomatic population.

Objective: The aim of this study is to study fecal carriage of carbpenem-resistant Enterobacteriaceae among selected communities in Yangon Region.

Methods: A community and laboratory based cross-sectional descriptive study was conducted from January 2018 to November 2019. The study population was recruited from selected townships of Yangon Region by using cluster sampling method. Collected stool samples were inoculated onto chromogenic agar and identification and antimicrobial susceptibility testing of the isolated bacteria were done by VITEK-2 compact system.

Results: A total of 1,480 stool samples were collected during the study period. A total of 57 Enterobacteriaceae were isolated by meropenem containing screening methods. Out of 57 isolates, 41 isolates showed carbapenem resistance. Among carbapenem-resistant Enterobacteriaceae, the most prominent bacteria were Escherichia coli (95%, 39/41) followed by Klebsiella pneumoniae and Enterobacter kobei (2.5% each).

Conclusions: This study is the community-based study that clearly demonstrated that an apparently healthy person could carry carbapenem-resistant Enterobacteriaceae in his or her intestinal bacteria and may act as a reservoir of carbapenem-resistant Enterobacteriaceae in the community he or she lives in.

Key words: carbapenem-resistant Enterobacteriaceae, fecal carriage
**Poster Presentations**

**PP 01. Molecular Subtyping of Human Respiratory Syncytial Virus in Mandalay**

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**PP 02. Effect of Hyoscine N-Butylbromide on Progression of Different Stages of Labour in Term Pregnancy**

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**PP 03. Antibiotic Profile of Bacteria isolated in Department of Microbiology, University of Medicine, Mandalay**

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**PP 04. Effect of Infiltrative Local Anaesthesia for Pain Relief after Caesarean Section**

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3. Professor and Head, Department of Obstetrics and Gynaecology, University of Medicine, Magway

**PP 05. SARS-CoV-2-related neurological manifestations: Case Series from Neurology Department, Yangon General Hospital**

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**PP 06. Apolipoprotein E genotyping in Alzheimer’s disease and other dementia disorders**

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**PP 07. Glucose Abnormalities in Patients with Acute Coronary Syndrome**

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**PP 08. Comparison of Greek Stroke with SiIRIRAJ Score and ALLEN Score in Clinical Diagnosis of Acute Stroke Patients**

Aye Kyaw Min
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**PP 09. Comparison of Cockcroft - Gault Formula and MDRD Equation in assessing Glomerular Filtration Rate among Type 2 Diabetic Patients**

Aung Ko Lwin¹, Khin Phyu Pyar² and Khin Maung Maung Than³
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2. Department of Nephrology, No. (1) DSGH (1000 Bedded) Mingaladon, Myanmar
3. Department of Nephrology, Defence Services Medical Academy, Mingaladon
PP 10. Cardiovascular Outcomes in Patients with Acute Coronary Syndrome using Grace Risk Score
Wai Phyo¹, Zaw Lin Aung²
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2. Head of Department of Cardiology, No (2) Defence Services General Hospital (1,000 Bedded)

PP 11. Relationship between platelet count/spleen diameter ratio and oesophageal varices in cirrhosis of liver
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1. Medical Specialist, No. (2) Military Hospital (300 Bedded), Ann
2. Professor & Head, Department of Gastroenterology & Hepatobiliary Medicine, Defence Services Medical Academy, Mingaladon

PP 12. Factors determining outcome of acute renal failure patients
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2. Honorary Professor, Department of Nephrology, Defence Services Medical Academy, Mingaladon

PP 13. Common Carotid Intima Media Thickness as a Risk Factor for Atherosclerosis
Nyi Min Han
Department of Medicine, Defence Services Medical Academy

PP 14. Relationship between Serum C-Reactive Protein and Severity of Chronic Obstructive Pulmonary Disease
Nyein Chan Soe
No. 1 (700 Bedded) Military Hospital, Pyin Oo Lwin

PP 15. Infection in Acute Ischaemic Stroke Patients
Nyan Ye Oo
No. (1) Defense Services General Hospital, 1000 Bedded, Defense Services Medical Academy

PP 16. Clinical Study of Physical Pain in Cancer Patients
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2. Department of Medicine, No. (1) DSGH (1000 Bedded) Mingaladon, Myanmar

PP 17. Cardiac Manifestations in Alcohol Dependence Syndrome
Wai Lynn Aung
No. (9) Military Hospital, 100-Bedded, Lashio, Defence Services Medical Academy

PP 18. Bone Mineral Density in Patient with Rheumatoid Arthritis
Zin Thu Aung
No. 1, 700 Bedded Military Hospital, Pyin Oo Lwin

PP 19. Challenges of antiretroviral therapy uptake and treatment outcomes of HIV positive people who inject drugs in Northern Shan State
Lu Tawng, Min Shwe, Naw Lawn, Phyo Wai Tu, Htet Su Kyi, Nyein Su Aye, San Hone, Nanda Myo Aung Wann, Yin Thet Nu Oo, Htun Nyunt Oo
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PP 20. Treatment Seeking Behaviour for Children with Dog Bite
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Thwelt Yee Cho, Zin Mar Win, Tin Moe Phyu
Department of Paediatrics, University of Medicine, Magway
PP 22. Clinical Spectrum of Childhood Tuberculosis in BCG Vaccinated and Unvaccinated Children
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2. National Center for Global Health and Medicine (NCGM), Tokyo, Japan
3. Japan International Cooperation Agency (JICA), Myanmar

PP 24. Initial Severity, Nerve Conduction Study and The Clinical Outcome of Bell’s Palsy
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PP 25. The prevalence of glaucoma among the people aged 40 years and above in North, South and East Dagon Townships
Hlaing May Than, Khin Me Me Thet, Kan Htoo Aung, Thuzar Han
Department of Ophthalmology, University of Medicine(2), Yangon

PP 26. A Brief View on Rapid Assessment of Avoidable Blindness Data
Thein Myint
Specialist Ophthalmic Surgeon, Myaing Township Hospital, Magway Region

PP 27. Public compliance with preventive measures against COVID-19
Nyein Su Aye, Thanda Linn, Hnin Ei Phyu, Yin Thet Nu Oo
Department of Medical Research, Ministry of Health and Sports

PP 28. Case Report: Multiple Retinal Artery Occlusions
Ei Kay Thwe Han
Department of Ophthalmology, Yangon Eye Hospital, University of Medicine 1, Yangon

PP 29. The Spectrum of Tuberculous Uveitis in Yangon Eye Hospital
May Zun Aung Win¹,², Ei Ei Lin Oo³, Yee Yee Aung¹,²
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2. Yangon Eye Hospital, Yangon, Myanmar

PP 30. Pigmented Fungal Corneal Ulcer
Aung Min Oo, Khin Oo May
Yangon Eye Hospital

PP 31. Haematological Manifestations in Covid-19 Infection
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PP 32. Outcome of Haematology patients with Covid-19 from North Okkalapa General and Teaching Hospital
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2. Emeritus Professor, University of Medicine 1, Yangon
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PP 33. Preliminary report of using Non-cryopreserved Stem Cell feasible for ASCT of Relapsed/Refractory Lymphoma
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