

Fostering Towards Unity & Excellence in Tackling Digestive Disorders

Annual Scientific Meeting of the MSGH



incorporating

GIA Symposium of the MSGH Nursing Chapter

in collaboration with

Queen Elizabeth Hospital I, Kota Kinabalu, Sabah

16th to 18th August 2024

Sabah International Convention Centre, Kota Kinabalu, Sabah, Malaysia

PRECONGRESS 15TH AUGUST 2024

8th Edition of EndoQE Hands-on Workshop

In collaboration with



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Mr Valentine Philominus

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Datuk Dr Raman Muthukaruppan

WELCOME MESSAGE



A very warm welcome to all participants of the Annual Scientific Meeting of Malaysian Society of Gastroenterology & Hepatology (MSGH) 2024. Congratulations to the organising committee of GUT 2024 for successfully organising this event, allowing participants the opportunity to encourage multi-sectoral discussions and exchange of ideas in the field of gastroenterology.

Events such as these are essential in fostering professional interactions and ensuring that the gastroenterology community has access to the most recent medical information. Platforms like this are one of the finest ways to turn technical advancements into practical steps to raise the level of delivery in the field of gastroenterology to patients.

While the Ministry of Health is committed to transforming healthcare for the benefit of the nation, this goal can't be achieved if we work in isolation. Platforms for exchanging ideas, knowledge sharing and policy discussions will benefit our healthcare system.

Well done to the GUT 2024 secretariat, esteemed speakers and all participants for making this event a success. I hope this symposium will motivate all of you to keep expanding what is feasible in the field of gastroenterology.

-Ta.

Datuk Seri Panglima Haji Hajiji Haji Noor Honourable Chief Minister of Sabah

WELCOME MESSAGE



I would like to thank the Organising Committee of GUT 2024, the Annual Scientific Meeting of the Malaysian Society of Gastroenterology & Hepatology, for their exceptional dedication and commitment. Your hard work and meticulous planning have brought together some of the brightest minds in gastroenterology and hepatology, fostering an environment of learning, collaboration, and innovation. This conference is a testament to your unwavering efforts and passion for advancing our field.

Events like these require immense coordination and effort, from selecting the right speakers and topics to ensuring that every logistical detail is meticulously planned. Your ability to bring together experts from various parts of the country and beyond, to share their knowledge and experiences, is truly commendable. It is through such collaborative efforts that we can continue to push the boundaries of medical science and improve patient care.

Furthermore, I would like to acknowledge the importance of knowledge sharing and collaboration that this conference promotes. The Sabah State Department of Health is committed to fostering an environment that encourages research, innovation and continuous learning. Thus, the collective efforts of healthcare providers, researchers, policymakers, and the community are essential in achieving excellence in healthcare.

I would like to express my sincere appreciation to all the speakers, participants, and sponsors for their contributions to this meeting. Your commitment to advancing gastroenterology and hepatology is truly inspiring, and I am confident that the knowledge and insights gained from this gathering will drive us towards new achievements and better patient care.

Once again, my deepest gratitude to the organizing committee for your exceptional efforts in making this event a success. I wish everyone a productive and enriching meeting, filled with valuable discussions and new friendships.

Thank you.

Datuk Dr Asits Sanna Sabah State Health Director

WELCOME MESSAGE



Welcome to GUT 2024!

On behalf of the Malaysian Society of Gastroenterology & Hepatology, I am honoured to host this year's Annual GUT Scientific Meeting here in Kota Kinabalu, Sabah, marking a significant return after 15 years.

Our theme for this year, 'Fostering Towards Unity & Excellence in Tackling Digestive Disorders', underscores our collective commitment to advancing the field of gastroenterology. As we gather to explore the latest advancements and breakthroughs, we are reminded of the power of collaboration in the pursuit of medical excellence.

Unity stands as our greatest strength in our shared mission to understand, diagnose, and treat digestive and liver disorders. By coming together, sharing knowledge, and supporting one another, we are able to elevate the standards of care, improve management strategies, and ultimately enhance patient outcomes. This conference is a testament to our ultimate commitment to these goals.

I would like to extend my deepest gratitude and appreciation to our Scientific Chairman, Professor Dr Raja Affendi, and Organising Committee including the Secretariat. Your unwavering support and dedication have been the cornerstone of this event's success. Your hard work and vision have made this gathering possible and I am profoundly grateful for your contributions.

I hope this publication serves as a valuable guide throughout the conference, providing everyone with insights and information that will inspire, help and enrich your practice. Thank you for your dedication and continued contributions to the fields of Gastroenterology and Hepatology.

Let us continue to strive for unity and excellence in all our endeavours!

Thank you.

Datuk Dr Raman Muthukaruppan Organising Chair, GUT 2024 &

President, MSGH

24TH MSGH ORATION DR D NAGESHWAR REDDY

Citation by Datuk Dr Raman Muthukaruppan



"How AI is Revolutionising GI and Endoscopic Industries"

Dr Nageshwar Reddy, fondly known as Nagi or simply Dr Reddy, was born on 18th March 1956 in the state of Andhra Pradesh, India. He obtained his MBBS from Kurnool Medical College in 1978 and completed post-graduation MD at the renowned Madras Medical College, Chennai, India in 1982. He then went on to specialize in Gastroenterology and obtained D.M. Gastroenterology in 1984 at the Post Graduate Institute of Medical Education and Research (PGI), Chandigarh, India.

Dr Reddy started his journey in gastroenterology as Assistant Professor of Gastroenterology at Nizam's Institute of Medical Sciences, Hyderabad and later Professor of Gastroenterology, at Guntur Medical College, Guntur. In 1995, he established the world-famous Asian Institute of Gastroenterology (AIG) in Hyderabad, India, the biggest stand-alone gastroenterology hospital in the world.

Dr Reddy has been recognised for his sterling efforts by his own country, India. In recognition of his outstanding leadership and contribution to the nation, he was awarded the Dr B C Roy Award for Development of Specialties given by the Indian Medical Council in 1995; the Padmasri Award in 2004 and the highly prestigious Padma Bhushan Award in 2016. He has received many awards presented by national and international organisations notably Master Endoscopist Award by the American Society of GI Endoscopy in 2009, International Service Award by the American Society of Gastroenterology in 2011 and Master of the World Gastroenterology Organisation in 2013. In addition, he has received numerous awards for his social work.

Dr Reddy has been involved in many international committees/boards and presently he is the Executive Founder of GIFT Foundation (Gastrointestinal and Liver Foundation for Research & Treatment of Cancer, a non-profit health organization), AI Institute Advisory Council Member of the American Society for Gastrointestinal Endoscopy (ASGE) and Course Director of the AGA/ASGE Postgraduate Course at upcoming DDW 2025 in San Diego.

Dr Reddy has delivered over 20 named orations/named lectures both nationally and internationally. Under his leadership, more than 150 live telecasts and workshops been relayed from AIG to the rest of the world since the year 2000, latest being in June 2024 Sao Paulo University, Brazil. His invited international faculty positions since 1992 have been numerous and something to be proud of. He has travelled extensively all over the world as an invited faculty in various international meetings, conferences, workshops and symposia. He is highly sought after expert endoscopist and speaker in these meetings. His last contribution was in DDW 2024 and ENDO 2024 Korea.

Dr Reddy is a member of over 20 editorial boards of international journals including the prestigious GIE, Endoscopy, WCG, GUT and others. He is a peer reviewer for over ten international journals. He also holds important additional responsibilities as Adjunct Professor in local and overseas universities.

Dr Reddy has 1066 papers published in both national and international journals up to June 2024 and has contributed to 15 international textbooks and chapters from 1998 to 2023.

21ST PANIR CHELVAM MEMORIAL LECTURE PROFESSOR DR RAJVINDER SINGH

Citation by Professor Dr Ida Normiha Hilmi



"State of the Art (and Science): Novel Diagnostic and Therapeutic Endoscopic Interventions in the GI Tract"

Professor Dr Rajvinder Singh is a Professor of Medicine with the University of Adelaide and the Director of Gastroenterology at the Lyell McEwin & Modbury Hospitals, South Australia.

To date, Professor Dr Singh has published 150 peer reviewed papers and 11 book chapters including being a Chief Editor of five textbooks. He has a h-index of 42.

He has been successful in obtaining more than AUD\$ 3 million in grants including grants from the Cancer Council and Cancer Australia to further investigate the utility of novel endoscopic imaging techniques in the detection of dysplasia and early cancer in Barrett's Oesophagus. In 2015, work on the investigation of the utility of serum biomarkers for colon cancer was selected as the top 10 best medical research initiatives in the country by the National Health and Medical Research Council (NHMRC, Australia). In 2019, work on Artificial Intelligence in the diagnosis of colorectal polyps was selected as one of three nominees for the Minister's Innovation Award.

Professor Dr Singh is actively involved in teaching undergraduate and postgraduate students. He is an internationally renowned endoscopist and is frequently invited to conduct basic and advanced endoscopy workshops. He has participated in more than 200 workshops and symposia. He has had speaking engagements and 'live' endoscopy demonstrations around the world including in Australia, United States of America, United Kingdom, Japan, Korea, India, Singapore, New Zealand, Indonesia, Taiwan, Hong Kong, Thailand, Vietnam, Malaysia, Myanmar, Saudi Arabia, Bangladesh, Ukraine, UAE, Brazil and The Philippines amongst other countries.

Professor Dr Singh has been integral in numerous journals. Presently, he is an Editorial Board Member of Clinical Endoscopy. He was a past Editorial Board Member of Digestive Endoscopy and Endoscopy and past Co-Editor of the journal, Endoscopy International Open. He is a Committee Member of the Standards of Practice and Publications Committee with the World Endoscopy Organisation (WEO). He was a Councillor with the Gastroenterological Endoscopic Society of Australia (GESA) and past chair of the Australian Gastrointestinal Endoscopic Association (AGEA).

Professor Dr Singh is an active clinician and researcher. His research interest continues with work in Endoscopic diagnosis and treatment of early cancer. This encompasses diseases in the oesophagus, stomach, duodenum, biliary tree and colon using various novel Advanced Mucosal Imaging (including AI) tools and subsequently looking at outcomes of endoscopic interventions.

MSGH LIFETIME ACHIEVEMENT AWARD PROFESSOR DATO' DR MRS S T KEW

Citation by Datuk Dr Jayaram Menon



Professor Dato' Dr Mrs S T Kew is currently Professor of Internal Medicine at the International Medical University Malaysia. She was previously the Dean of the School of Medicine IMU from 2012 to 2018, the Dean of the Clinical School IMU from 2009 to 2011, and Head of Department of Internal Medicine IMU from 2007 to 2009.

Before joining the International Medical University, Dato' Dr Kew served as Consultant Physician and Gastroenterologist in Hospital Kuala Lumpur. She rose to the post of Head of Internal Medicine in the Ministry of Health Malaysia. While in the Ministry, she helped to formalize higher specialist training in Gastroenterology and Internal Medicine in the country.

She was instrumental in the formation of the Combined Gastro-Surgical Endoscopy services in Hospital Kuala Lumpur in 1996. Under her leadership, this unit became a centre of excellence in therapeutic endoscopy. She was the pioneer who formalised Gastroenterology Fellowship training in the Ministry of Health Malaysia in 1990. All of us who graduated from the Ministry of Health Gastroenterology Fellowship Programme owe her a deep debt of gratitude for her vision and leadership.

Dato' Dr Kew is a Past Master of the Academy of Medicine of Malaysia and Past President of the College of Physicians. She chairs the MRCP PACES Coordinating Committee Malaysia. She is a member of the Preliminary Inquiry Committee, and member of Disciplinary Panel of the Malaysian Medical Council.

Dato' Dr Kew is active in both undergraduate and postgraduate medical education. She is an examiner in the Membership of the Royal College of Physicians PACES examination, and hosts the PACES examination regularly. Let there be no doubt about the tremendous contribution to Internal Medicine in Malaysia that Dato' Dr Kew has made as a physician, trainer, mentor and leader.

Dato' Dr Kew's research and academic interests include chronic hepatitis B and C, fatty liver disease, irritable bowel syndrome and probiotics, NSAIDs and the gastrointestinal tract, adverse drug reactions, patient safety, clinical practice guidelines, issues of medical professionalism and ethics, and clinical assessment.

It is the privilege of the MSGH to award its Lifetime Achievement Award to Professor Dato' Dr Mrs S T Kew, a true icon of Internal Medicine and Gastroenterology in Malaysia.

PROGRAMME SUMMARY

Date Time	te 16 th August 2024 (Friday)		17 th August 2024 (Saturday)		18 th August 2024 (Sunday)
0730 - 0800	Regist	Registration			
0800 - 0830	SYMPOSIUM 1 Managing	Welcome Remarks	SYMPOSIUM 2		SYMPOSIUM 5 Managing Hepatitis B,
0830 - 0900	Difficult DGBI; Scenario-Based	NURSING/GIA	Managing Difficult IBD	L5	Hepatitis C and MAFLD
0900 - 0930	Discussion	SYMPOSIUM 1 Infection		L6	STATE-OF-ART LECTURE 1
0930 - 1000	LECTURE 1 21st Panir Chelvam Lecture	Prevention	Tea Satellite Symposium 4	L7	Tea Satellite Symposium 7
1000 - 1030	Coffee Break		: / Booth Visit		Break
1030 - 1100	OPENING CEREMONY		Tea Satellite Symposium 5	L8	STATE-OF-ART LECTURE 2
1100 - 1130				ognition Service Award URE 2	STATE-OF-ART LECTURE 3
1130 - 1200			24 th MSG	H Oration	SYMPOSIUM 6
1200 - 1230	Lunch Satellite Symposium 2		Lunch Satellite	Symposium 3	Presidential Round Table Discussion
1230 - 1300	Friday Prayers / Lunch		Lunch Satellite	Symposium 4	APDW 2024 - Update
1300 - 1330				L9	MSGH Graduation Ceremony
	Young	L1	SYMPOSIUM 3 Gut Microbiome		Prize Presentation & Closing Speech
1330 - 1400	Investigator Award / Oral	L2	for GI and Beyond	L10	Lunch
1400 - 1430	Poster Presentation	L3			
1430 - 1500	Tea Satellite Symposium 1	L4	Tea Satellite Symposium 6		
1500 - 1530	Tea Satellite Symposium 2	NURSING/GIA SYMPOSIUM 2	, ,,,,,,		MSGH - Community Service
1530 - 1600	Tea Satellite Symposium 3	Case Discussion - Endoscopy Patient Management	SYMPOSIUM 4		Engagement Session
1600 - 1630	, .	Booth Visit	MDT in Liver Cirrhosis		
1630 - 1700					
1700 - 1730	0		Tea Break /	Booth Visit	Pre-Congress Workshop
1730 - 1900	PRESIDENTIAL DINNER		MSGH Annual G	al General Meeting	15 th August 2024 (Thursday) 8 th Edition of EndoQE
1900 - 1930			\$8	33 28	Hands-On Workshop
1930 - 2000		V. 500	GALA DINNER		Time : 0730 hrs - 1730 hrs Venue : Department of Medicine,
2200 - 2200	00		(By Subscri		Queen Elizabeth Hospital, Kota Kinabalu, Sabah

PRE-CONGRESS WORKSHOP 15TH AUGUST 2024 (THURSDAY)

8th Edition of EndoQE Hands-On Workshop in conjunction with GUT 2024

Time: 0800 - 1700 hrs

Venue: Department of Medicine, Endoscopy Unit, Queen Elizabeth Hospital 1, Kota Kinabalu, Sabah

Organising Chairperson: Raman Muthukaruppan

Course Directors: James Emmanuel Gilbert Fernandez, Ryan Ponnudurai

Moderators: Nerenthran Loganathan, Deborah Chew Chia Hsin

Faculties: D Nageshwar Reddy, Rajvinder Singh, Pradermchai Kongkam, Yip Hon Chi, Christopher Khor, Ryan Ponnudurai, Sanjiv Mahadeva, Sharmila Sachithanandan, Abraham Mathew George,

Johann Faizal Khan, Ho Shiaw Hooi

Programme		
	Part 1 (Live Demonstration)	
0730 - 0800	Registration	
0810 - 0900	Lecture 1 & 2	Seminar Room 2, Level 2
0900 - 0915	Breakfast	
0915 - 1315	Live Demonstration	Endoscopy Unit, Level 5
1315 - 1400	Lunch	
	Part 2 (Hands-On Workshop)	
1400 - 1700	Hands-On Workshop	Endoscopy Unit, Level 5
1700 - 1730	CLOSING REMARKS	

PRE-CONGRESS WORKSHOP 15TH AUGUST 2024 (THURSDAY)



DAILY PROGRAMME

DAY 1 - 16TH AUGUST 2024 (FRIDAY)

0730 - 0800

Registration

0800 - 0930

SYMPOSIUM 1

Managing Difficult DGBI; Scenario-Based

Discussion

Moderators: Andrew Chua Seng Boon /

S Mahendra Raj

Managing Difficult Abdominal Pain and Loose Stools

Gwee Kok Ann (Singapore)

How to Handle a Difficult Functional Dyspepsia and

Bloating Patient

Somchai Leelakusolvong (Thailand)

Managing Difficult Chronic Constipation

Lee Yeong Yeh (Malaysia)

Q&A

0930 - 1000

LECTURE 1

21st Panir Chelvam Lecture

Citation: Ida Normiha Hilmi

State of the Art (and Science): Novel Diagnostic

and Therapeutic Endoscopic Interventions in the GI

Tract

Rajvinder Singh (Australia)

0800 - 0830

Welcome Remarks

Jernih Majalu (Chair, MSGH Nursing/GIAs

Chapter & President, MSGNMA)

Jayaram Menon (Consultant Gastroenterologist &

Hepatologist & MSGNMA Advisor)

Raman Muthukaruppan (Chair, Organising GUT

2024, President MSGH & MSGNMA Advisor)

William Gotulis (Director, Queen Elizabeth 1 Hospital)

0830 - 1000

NURSING/GIA SYMPOSIUM 1

Infection Prevention

Moderators: Rosalin Sulit / Chin Su Fei

Current and Future Trends in Endoscope

Reprocessing (Virtual)

Nenny Suzanah (Singapore)

Mitigating Infection Risks in Endoscopic Procedures

Manorani K Doresamy (Malaysia)

Rinsing & Water Quality: The Neglected Aspect of

Endoscope Reprocessing

Jernih Majalu (Malaysia)

Q&A

1000 - 1020 Coffee Break / Booth Visit

1020 - 1115 OPENING CEREMONY

DAILY PROGRAMME DAY 1 - 16TH AUGUST 2024 (FRIDAY)

1115 - 1145 Lunch Satellite Symposium 1 (AstraZeneca)

Moderator: Ho Shiaw Hooi

Recent Advances in GI Cancer Treatment - Things Frontliners should Know

Eng Jie Yi (Malaysia)

1145 - 1215 Lunch Satellite Symposium 2 (Takeda)

Moderator: Alex Leow Hwong Ruey

Decoding the Interplay Between Helicobacter Pylori and Gastro-oesophageal Reflux Disease:

Clinical Insights and Treatment Approaches

Chua Tju Siang (Singapore)

1215 - 1315 Friday Prayers / Lunch

1315 - 1445

Young Investigator Award

Moderators: S Mahendra Raj / Lee Yeong Yeh

Judges: Rajvinder Singh (Australia) / Jose D Sollano (Philippines) / Somchai Leelakusolvong (Thailand)

Oral Poster Presentation

Moderators: Chan Wah Kheong / Nazri Mustaffa

Judges: Sakkarin Chirapongsathorn (Thailand) /

Gwee Kok Ann (Singapore) / Dadang Makmun (Indonesia) / Ho Shiaw Hooi (Malaysia)

1445 - 1515

Tea Satellite Symposium 1 (First Pharmaceutical)

Moderators: Lu Chee Men / Deborah Chew Chia Hsin

UDCA (Ursosan) in Preventing Atherosclerosis, Steatosis and Liver Fibrosis in MASLD (NAFLD)

Patients

Marina V Maevskaya (Russia)

1315 - 1345

L1

Moderators: Rusinah Sologi / Jernih Majalu

Best Practices for the Management of Clean and

Dirty Spaces

Benoit Biousse (Singapore)

1345 - 1415

L2

Moderators: Valentine Philominus / Savio Sanggang

The Evolving Role of Nurses/GIAs in the Management of Gastrointestinal Bleeding

Jayaram Menon (Malaysia)

1415 - 1445

L3

Moderators: Haslinda Taipin / Azizon Saad

Quality Assurance in Endoscopy Unit

Krish Ragunath (Australia)

DAILY PROGRAMME DAY 1 - 16TH AUGUST 2024 (FRIDAY)

1515 - 1545

Tea Satellite Symposium 2 (Viatris)

Moderator: Thevaraajan Jayaraman

Expert Insights: Empowering MAFLD Management

with Antioxidant

Sakkarin Chirapongsathorn (Thailand)

1545 - 1615

Tea Satellite Symposium 3 (Servier)

Moderator: Lee Yeong Yeh

The Great Downhill Race: From Gut Chaos to

Haemorrhoidal Havoc

Alex Leow Hwong Ruey (Malaysia)

1445 - 1515

L4

Moderators: Rosalin Sulit / Jernih Majalu

Education and Training in Endoscopy

Nenny Suzanah (Singapore)

1515 - 1615

NURSING/GIA SYMPOSIUM 2

Case Discussion - Endoscopy Patient Management

Moderators: Jernih Majalu / Manorani K Doresamy

Quality Management of Patients Undergoing Endoscopy: Challenges, Issues, and Strategies for

Management

Rosalin Sulit (Malaysia)

Expert Panel:

Nenny Suzannah (Singapore) / Krish Ragunath (Australia)

Q&A

1615 - 1645 Tea Break / Booth Visit

1730 - 2030 PRESIDENTIAL DINNER (By Invitation Only)

DAILY PROGRAMME

DAY 2 - 17TH AUGUST 2024 (SATURDAY)

0800 - 0930 SYMPOSIUM 2

Managing Difficult IBD

Moderators: Ida Normiha Hilmi / James Emmanuel /

Jason Chin Kuet Tze

Comprehensive Update on the Treatment Strategies and Personalised Care in Ulcerative Colitis

Ooi Choon Jin (Singapore)

Comprehensive Update on the Treatment Strategies and Personalized Care in Crohn's Disease

Ng Siew Chien (Hong Kong)

Intestinal Ultrasound for IBD - Old Tools for New Roles

Emily Wright (Australia)

Missteps in Managing IBD in Asia: What do Experts Say?

Jose D Sollano (Philippines)

Q&A

0930 - 1000

Tea Satellite Symposium 4 (Reckitt Benckiser Health)

Moderator: Raman Muthukaruppan

PPI Use: An Approach to Safe De-Prescribing

S Mahendra Raj

0830 - 0900

L₅

Moderators: Haslinda Taipin / Lorna Sabinus

Staff Engagement - Tips and Tricks for Better

Teamwork

Manorani K Doresamy (Malaysia)

0900 - 0930

L6

Moderators: Valentine Philominus /

Manorani K Doresamy

Percutaneous Endoscopic Gastrostomy (PEG):-Beyond Basics: Advanced Techniques and Innovations in PEG Tube Management Nerenthran Loganathan (Malaysia)

0930 - 1000

L7

Moderators: Azizon Saad / Lorna Sabinus

Comprehensive Care Guide for Patient after PEG

Tube Insertion

Chin Su Fei (Malaysia)

1000 - 1030 Coffee Break / Booth Visit

DAILY PROGRAMME DAY 2 - 17TH AUGUST 2024 (SATURDAY)

1030 - 1100

Tea Satellite Symposium 5 (Johnson & Johnson)

Moderator: Khairul Najmi Muhammad Nawawi

Management in Crohn's Disease: Which Comes First?

Julajak Limsrivilai (Thailand)

1030 - 1100

L8

Moderators: Rusinah Soligi / Zulkifli Zain

Al in Upper and Lower GI: Benefits and Concerns

Rajvinder Singh (Australia)

1100 - 1115 MSGH Presidential Recognition Service Award

Master of Ceremony: Sattian Kollanthavelu / Nik Razima Wan Ibrahim

1115 - 1145 **LECTURE 2**

24th MSGH Oration

Citation: Raman Muthukaruppan

How AI is Revolutionising GI and Endoscopic Industries

D Nageshwar Reddy (India)

1145 - 1215 Lunch Satellite Symposium 3 (AstraZeneca)

Moderator: Jayaram Menon

Optimal Usage of PPI in Clinical Practice

Francis Chan (Hong Kong)

1215 - 1300 Lunch Satellite Symposium 4 (Takeda)

Moderator: Raja Affendi Raja Ali

Treatment Sequencing for Optimal Disease Control in Crohn's Disease

Ng Siew Chien (Hong Kong)

DAILY PROGRAMME DAY 2 - 17TH AUGUST 2024 (SATURDAY)

1300 - 1430 SYMPOSIUM 3

Gut Microbiome for GI and Beyond

Moderators: Lee Yeong Yeh / Mazlam Zawawi /

S Mahendra Raj

Gut Microbiome Research in Malaysia Norfilza Mohd Mokhtar (Malaysia)

Transforming Microbiome Modulation: From Bench to Bedside

Ng Siew Chien (Hong Kong)

Clinical Application of Gut Microbiome in GI Diseases Francis Chan (Hong Kong)

Q&A

1430 - 1530

Tea Satellite Symposium 6 (Abbott)

Moderators: Soon Su Yang / Lau Su Yin

Functional Dyspepsia: Treatment According to Subtype Versus Empirical Proton Pump Inhibitor

Chuah Kee Huat (Malaysia)

Hepatoprotection Redefined: The Role of SAMe

in Liver Diseases

Ruveena Bhavani Rajaram (Malaysia)

1300 - 1330

L9

Moderators: Chin Su Fei / Manorani K Doremsamy

FNB Needles in Endoscopic Ultrasound (EUS): Best Practices and Techniques / Nursing Perspective

Sharmila Sachithanandan (Malaysia)

1330 - 1400

L10

Moderators: Zulkifli Zain / Azizon Saad

Nutrition in Patients with Inflammatory Bowel

Diseases

Margareta Leong (Malaysia)

DAILY PROGRAMME DAY 2 - 17TH AUGUST 2024 (SATURDAY)

1530 - 1700 **SYMPOSIUM 4**

MDT in Liver Cirrhosis

Moderators: Tan Soek Siam /

Raman Muthukaruppan / Johann Faizal

Acute-on-Chronic Liver Failure (ACLF): What a

Gastroenterologist Needs to Know Sakkarin Chirapongsathorn (Thailand)

Functional Cure of Chronic Hepatitis B: Is It Really a Cure?

Lim Seng Gee (Singapore)

Keeping my Cirrhotic Patients "Well"- Current Best Practice

Janus Ong (Phillipines)

Identifying Potential Liver Transplant Candidates - Who, When and How?

Haniza Omar (Malaysia)

Q&A

1700 - 1730 Tea Break / Booth Visit1730 - 1900 MSGH Annual General Meeting

1930 - 2200 GALA DINNER (By Subscription Only)

DAILY PROGRAMME

DAY 3 - 18TH AUGUST 2024 (SUNDAY)

Christopher Khor Jen Lock (Singapore)

0800 - 0900 SYMPOSIUM 5 | Managing Hepatitis B, Hepatitis C and MAFLD Moderators: Robert Ding Pooi Huat / Rosmawati Mohamed Epidemiology of Hep B, C and MAFLD in Southeast Asia Sakkarin Chirapongsathorn (Thailand) Adopting the Best in Science for CHB Patients in Clinic Lim Seng Gee (Singapore) Six More Years - Our Roles to get the HCV Elimination Goal Posts Janus Ong (Philippines) Non-Invasive Test Use & Update Therapy for MALFD Chan Wah Kheong (Malaysia) O&A 0900 - 0930 STATE-OF-ART LECTURE 1 Moderators: Kandasami Palayan / Tan Huck Joo Transitioning Towards Sustainable Care & Green Endoscopy: A Catalyst for Clinical Excellence Ang Tiing Leong (Singapore) Tea Satellite Symposium 7 (Hovid Pharmacy) 0930 - 1000 Moderator: Lau Su Yin Sodium Alginate - Keeping Your GERD Down Rafiz Abdul Rani (Malaysia) 1000 - 1030 Break STATE-OF-ART LECTURE 2 1030 - 1100 Moderators: Dennis Nyuk Fung Lim / Abraham George Therapeutic Endoscopic Ultrasound: We Can Do It, But Should We?

DAILY PROGRAMME DAY 3 - 18TH AUGUST 2024 (SUNDAY)

1100 - 1130	STATE-OF-ART LECTURE 3
	Moderators: Raman Muthukaruppan / Nerenthran Loganathan
	Understanding & Advancing Colorectal Cancer Screening: A Comprehensive Approach Krish Ragunath (Australia)
1130 - 1230	SYMPOSIUM 6 Presidential Round Table Discussion
	Moderator: Sanjiv Mahadeva / Ida Normiha Hilmi / Sharmila Sachithanandan
	Presidents
	Raman Muthukaruppan (Malaysian Society of Gastroenterology & Hepatology)
	Ooi Wei Keat (Malaysian Upper Gastrointestinal Surgical Society)
	Luqman Mazlan (Malaysian Society of Colorectal Surgeons)
	Dadang Makmun (Indonesian Society of Gastroenterology)
	Stephen Tsao Kin Kwok (Gastroenterological Society of Singapore)
	Somchai Leelakusolvong (Gastroenterological Association of Thailand)
1230 - 1245	APDW 2024 - Update
	Welcome to Bali
	Dadang Makmun (Indonesia)
1245 - 1315	MSGH Graduation Ceremony
	Master of Ceremony: Norasiah Abu Bakar / Hamiza Shahar
1315 - 1345	Prize Presentation & Closing Speech
1345 - 1430	Lunch
1430 - 1700	MSGH - Community Engagement Session (MSGH-CES) Moderators: Sattian Kollanthavelu / Nik Razima Wan Ibrahim
	Norasiah Abu Bakar / Hamiza Shahar / Syuhada Dan Adnan / James Emmanuel

POST-CONGRESS COMMUNITY ENGAGEMENT SESSION 18TH AUGUST 2024 (SUNDAY)

MSGH - Community Engagement Session (MSGH-CES) Get to Know your Gastro and Liver

Venue: Sabah International Convention Centre

Time: 1400 - 1700

Moderators: Sattian Kollanthavelu, Nik Razima Wan Ibrahim

Programme

1.08	
1400 - 1415	Registration
1415 - 1430	Welcome Remarks and Introduction about MSGH Raman Muthukaruppan, President of MSGH
1430 - 1500	Introduction - Anatomy and Functions of your GI Tract and Liver Norasiah Abu Bakar
1500 - 1530	Hepatitis B, Hepatitis C and Quiz Hamiza Shahar
1530 - 1600	Fatty Liver and quiz Syuhada Dan Adnan
1600 - 1630	Colon Cancer and Quiz James Emmanuel
1630 - 1700	Tea Break

OPENING CEREMONY

Date: 16th August 2024 (Friday)

Venue: Sipadan 1, Sabah International Convention Centre, Kota Kinabalu, Sabah

0950	Delegates to be Seated in the Hall
1000	Arrival of Guest of Honour YB Datuk Seri Panglima Dr Joachim Gunsalam, Deputy Chief Minister and Minister of Industrial Development
	Representing Yang Amat Berhormat Datuk Seri Panglima Haji Hajiji Bin Haji Noor, Chief Minister of Sabah
1010	Group Photo
	Procession into Sipadan 1
1020	Negara-Ku
	Sabah Tanah Airku
	Doa Recital
1030	Cultural Performance
1040	Welcome Speech by President of MSGH & Organising Chairperson of GUT 2024 Datuk Dr Raman Muthukaruppan
1045	Speech by Director, Sabah Health Department Datuk Dr Asits Sanna
1050	Speech by YB Datuk Seri Panglima Dr Joachim Gunsalam, Deputy Chief Minister and Minister of Industrial Development to be followed by the Official Opening Presentation of Souvenir
1100	Video Montage
1110	Procession Out of the Hall Visiting of Booths
1120	Press Conference

MODERATORS

Abraham Mathew George

KPJ Johor Specialist Hospital Johor

Azizon Saad

Hospital Pulau Pinang Penang

Chan Wah Kheong

Universiti Malaya Medical Centre Kuala Lumpur

Deborah Chew Chia Hsin

Hospital Canselor Tuanku Muhriz Universiti Kebangsaan Malaysia Kuala Lumpur

Jason Chin Kuet Tze

Gleneagles Hospital Kuala Lumpur Kuala Lumpur

Chin Su Fei

Hospital Lam Wah Ee Penang

Andrew Chua Seng Boon

Pusat Gastro Ipoh Ipoh, Perak

Robert Ding Pooi Huat

Island Hospital Penang

Haslinda Taipin

Training Institute Ministry of Health Malaysia Kota Kinabalu, Sabah

Ho Shiaw Hooi

Universiti Malaya Medical Centre Kuala Lumpur

Ida Normiha Hilmi

Universiti Malaya Medical Centre Kuala Lumpur

James Emmanuel

Queen Elizabeth Hospital Kota Kinabalu, Sabah

Jayaram Menon

Pantai Hospital Ayer Keroh Melaka

Jernih Majalu Lim

Penang Adventist Hospital Penang

Johann Faizal

Selayang Hospital Selangor

Kandasami Palayan

Hospital Tuanku Ja'afar Seremban, Negeri Sembilan

MODERATORS

Khairul Najmi Muhammad Nawawi

Hospital Canselor Tuanku Muhriz Universiti Kebangsaan Malaysia Kuala Lumpur

Lau Su Yin

Hospital Sultan Abdul Aziz Shah Universiti Putra Malaysia Selangor

Lee Yeong Yeh

Hospital Universiti Sains Malaysia Kubang Kerian, Kelantan

Alex Leow Hwong Ruey

Pantai Hospital Kuala Lumpur Kuala Lumpur

Dennis Nyuk Fung Lim

Doncaster and Bassetlaw Teaching Hospitals NHS Foundation Trust

England

Lorna Sabinus

Queen Elizabeth Hospital Kota Kinabalu, Sabah

Lu Chee Man

Queen Elizabeth Hospital Kota Kinabalu, Sabah

Manorani K Doresamy

PICASO Hospital Selangor

Mazlam Mohd Zawawi

KPJ Ampang Puteri Specialist Hospital Ampang, Selangor

Nazri Mustaffa

Hospital Universiti Sains Malaysia Kubang Kerian, Kelantan

Nerenthran Loganathan

KPJ Sabah Specialist Hospital Kota Kinabalu, Sabah

Nik Razima Wan Ibrahim

Hospital Serdang Selangor

Raja Affendi Raja Ali

School of Medical and Life Sciences Sunway University Selangor

Raman Muthukaruppan

Queen Elizabeth Hospital Kota Kinabalu, Sabah

Rosalin Sulit

Training Institute Ministry of Health Malaysia Queen Elizabeth Hospital Kota Kinabalu, Sabah

MODERATORS

Rosmawati Mohamed

Universiti Malaya Medical Centre Kuala Lumpur

Rusinah Sologi

Training Institute Ministry of Health Malaysia Kota Kinabalu. Sabah

Ryan Ponnudurai

Prince Court Medical Centre Kuala Lumpur

S Mahendra Raj

Pantai Hospital Kuala Lumpur Kuala Lumpur

Sanjiv Mahadeva

Universiti Malaya Kuala Lumpur

Sattian Khollanthavelu

Hospital Tuanku Ja'afar Seremban, Negeri Sembilan

Savio Sanggang

Queen Elizabeth Hospital Kota Kinabalu, Sabah

Sharmila Sachithanandan

Subang Jaya Medical Centre Kuala Lumpur

Soon Su Yang

KPJ Kuching Specialist Hospital Sarawak

Tan Huck Joo

Cengild G.I. Medical Centre Kuala Lumpur

Tan Soek Siam

Selayang Hospital Selangor

Thevaraajan Jayaraman

Hospital Al-Sultan Abdullah Universiti Teknologi MARA (UiTM) Selangor

Valentine Philiminus

Queen Elizabeth Hospital Kota Kinabalu, Sabah

Zulkifli Zain

Hospital Canselor Tuanku Muhriz Universiti Kebangsaan Malaysia Kuala Lumpur



Ang Tiing Leong

Professor Dr Ang Tiing Leong is Senior Consultant, Department of Gastroenterology and Hepatology, and Head of Research, at Changi General Hospital, Singapore. He is Clinical Professor at Duke-NUS Medical School and Adjunct Professor at Yong Loo Lin School of Medicine, National University of Singapore and Lee Kong Chian School of Medicine, Nanyang Technological University. He has subspecialty clinical interests in therapeutic ERCP and interventional EUS and other advanced endoscopic procedures. His current research interests include the use of image enhancement technologies and artificial intelligence in endoscopy, and gut microbiome. He is Chairperson of the Gastroenterology Residency Advisory Committee. He is Council member of Academy of Medicine, Singapore (AMS), Asian Pacific Association of Gastroenterology (APAGE) and Chair of APAGE Taskforce on Green and Sustainability in Gastroenterology. He previously served as Chief, Department of Gastroenterology and Hepatology, Changi General Hospital, President of the Gastroenterological Society of Singapore, and Chairperson of the Chapter of Gastroenterologists, AMS.



Benoit Biousse

Benoit (Ben) is an immunologist and microbiologist by education (MSc, Nottingham University, School de Medicine). He started his career in France working in R&D for Sanofi, a pharmaceutical company. and then he moved to the stem cell industry providing education and solutions to researchers based in Europe.

He later had a chance to work in medical diagnostic, with a specialization in coagulation. Firstly, based in India he later on transferred in Hong Kong where he was in charge of the ASIAN region.

Lastly Ben has been leading ECOLAB's Healthcare division APAC for the past 6 years and is now based in Singapore.

His passion for infection control and patient safety drives him across the region where he either organise with his team or gives lectures to around 20 to 30 educational events every year. All thanks to close collaboration with the different nursing and infection prevention societies in Asia.



Francis Chan

Professor Dr Francis Chan, Professor of Medicine of The Chinese University of Hong Kong, is an internationally renowned clinician-scientist and an entrepreneur. He pioneered the research of gastrointestinal bleeding and clinical applications of gut microbiome. In 2019, his team established Asia's first Microbiota Innovation Center (MagIC) to transform microbiome research into a new biotechnology industry. His contributions in gastroenterology are recognized worldwide with numerous awards and honours, including among the first researchers in Asia to receive the International Leadership Award of the American College of Gastroenterology in 2018, and multiple international innovation and entrepreneurial awards.



Chan Wah Kheong

Professor Dr Chan is Professor of Medicine, Director of the Division of Gastroenterology and Hepatology, and Senior Consultant Gastroenterologist and Hepatologist at Universiti Malaya, Universiti Malaya Medical Centre and Universiti Malaya Specialist Centre. He served as an Executive Committee Member of the Malaysian Society of Gastroenterology & Hepatology between 2015 and 2021. He was the Scientific Co-Chair and a core member of the Organizing Committee for the APDW 2021. He completed two terms as Associate Editor for the Journal of Gastroenterology and Hepatology between 2018 and 2023, and is a current member of the Editorial Board for Clinical Gastroenterology and Hepatology, Alimentary Pharmacology and Therapeutics, and Clinical and Molecular Hepatology. He is a member of the Global NASH Council, the APASL MAFLD Consortium, the GO Asia Workgroup, and the CAP Prognosis Study Group. He has published numerous full papers in peer-reviewed journals and presented in both local and international conferences.



Sakkarin Chirapongsathorn

Dr Sakkarin Chirapongsathorn is a gastroenterologist and hepatologist, researcher, and Associate Professor at Phramongkutklao College of Medicine, Bangkok, Thailand. He obtained a medical degree from Khon Kaen University in 2005. Following his training in Internal Medicine and Gastroenterology in Thailand, he joined the clinical research fellowship programme at Mayo Clinic, Rochester, Minnesota, USA from 2014 to 2016. He graduated with a master's degree in clinical Translational and Science at Mayo Clinic College of Medicine and Science in 2016 which focused on area of complications of cirrhosis and steatotic liver diseases mentorship by Professors Patrick S Kamath and Vijay Shah at Mayo Clinic in Rochester Minnesota, USA.



Chua Tju Siang

Dr Chua Tju Siang is among the most accomplished gastroenterologists in Singapore and leads the AliveoMedical practice with a depth of credentials and international experience. As a consummate thought leader and published academic, he has received several accolades and awards over the years. Notably among them, he was awarded the Warren and Marshall Helicobacter Pylori Award by Australian Nobel laureates, Professors Robin Warren and Barry Marshall, for research into the link between various strains of Helicobacter pylori and ulcer disease. He is a recognised leader in the field of endoscopy and his subspecialty interest of interventional endoscopy and endosonography. He also has a keen interest in the development of standards for high-quality endoscopy and is a member of the Quality Assurance Subcommittee of the National Colorectal Cancer Screening Programme of Singapore. He is often invited as faculty to local and international conferences, both as a speaker as well as to demonstrate advanced endoscopic procedures. He is currently the Chairman of the Chapter of Gastroenterologists, Academy of Medicine, Singapore, as well as a past President of Gastroenterological Society of Singapore.



Chuah Kee Huat

Associate Professor Dr Chuah Kee Huat is currently a consultant in internal medicine, gastroenterology, and hepatology at Universiti Malaya, Universiti Malaya Medical Centre and UM Specialist Centre. He is well trained in general gastrointestinal endoscopic procedures and advanced endoscopic procedures, including endoscopic ultrasound (EUS), endoscopic retrograde cholangiopancreatography (ERCP). He has specialist interest in performing oesophageal high-resolution manometry. He has also made significant contributions to the field through his publications in international peer-reviewed prestigious medical journals, like Clinical Gastroenterology & Hepatology, Alimentary & Pharmacology Therapeutics, Neurogastroenterology & Motility and Liver International. He also received multiple awards for his work from local and international conferences. He is also actively participating in local and international research collaborations. His research interest is in functional gastrointestinal disorders, including irritable bowel syndrome.



Dadang Makmun

Professor Dr Dadang Makmun is recently a Professor of Medicine and Chair of Department of Internal Medicine, Faculty of Medicine, Universitas Indonesia - Cipto Mangunkusumo National General Hospital, Jakarta, Indonesia. He graduated from Faculty of Medicine, Universitas Indonesia in 1983 and he has been working as a gastroenterologist in Cipto Mangunkusumo National General Hospital since 1995. He was the past President of Indonesian Society for Digestive Endoscopy (ISDE) and the President of Indonesian Society of Gastroenterology (ISG). Currently, he is appointed as the Congress President of APDW 2024, Bali, Indonesia. He is also a member of WEO research committee and IBD committee of WGO 2024-2025. His majors are diagnostic and therapeutic endoscopy including upper and lower GI endoscopy, EUS, ERCP, and bariatric endoscopy.



Eng Jie Yi

Dr Eng Jie Yi is a seasoned professional specializing in clinical oncology, currently serving as a Clinical Oncologist at the Department of Radiotherapy, Oncology, and Palliative Care at Sarawak General Hospital since April 2022. Previously, she held positions including Clinical Oncologist from June 2021 to April 2022 at Universiti Malaya Medical Centre. She is actively involved in professional societies, holding memberships in the Malaysian Oncological Society (MOS), the European Society of Medical Oncology (ESMO), and the American Society of Clinical Oncology (ASCO). Her memberships underscore her commitment to professional development and staying updated with advancements in oncology practice. She has contributed significantly to oncology through publications such as a study on curative lung metastectomy for fibrolamellar hepatocellular carcinoma and participation in clinical trials including early phase investigations of novel therapies for advanced solid tumors, demonstrating her commitment to advancing cancer treatment and research.



Gwee Kok Ann

Dr Gwee Kok Ann is Adjunct Associate Professor of Medicine at the National University of Singapore, and Consultant Gastroenterologist at Gleneagles Hospital Singapore. He obtained his medical degree from National University of Singapore, and his PhD from University of Sheffield for his thesis on Post-Infection IBS. His research includes epidemiology and Asian socio-cultural perspectives, of gastrointestinal diseases, the roles of inflammation, gut microbes, probiotics, sleep disturbance and psychological factors in functional gastrointestinal disorders, and gastroesophageal reflux disease. A founding member and past president of the Asian Neurogastroenterology & Motility Association, he was a lead author of the first Asian Consensus on IBS, guidelines for the Primary Care Management of Chronic Constipation in Asia, and the Asian-Pacific guidelines for the management of functional dyspepsia overlapping with other gastrointestinal disorders. Recently he has taken an interest in overlapping Functional Gl Disorders, and as well the potential of herbal medicines in the treatment of digestive disorder.



Haniza Omar

Dr Haniza Omar graduated from the Royal College of Surgeons in Ireland in 1996. She pursued her Masters Programme in Internal Medicine with Hospital Universiti Kebangsaan Malaysia and subsequently took Hepatology as a subspecialty in 2006. She completed her training in 2009 including a year stint in the Transplant Center in St Vincent's University hospital in Dublin, Ireland. She is currently the Head of Department for Hepatology and Gastroenterology. She has been working as Consultant Hepatologist and Gastroenterologist in Hospital Selayang since 2010. She is Vice President in Malaysian Society of Transplant, a member Malaysian Society of Gastroenterology and Hepatology and Hepatitis Support Group. She is also active in Clinical Research. She is the Principle Investigator in clinical trials - mainly in biomarkers for Hepatitis B, DAA's in Hepatitis C. Her areas of interest includes Viral Hepatitis and Liver Transplantation.



Jayaram Menon

Datuk Dr Jayaram Menon is Consultant Gastroenterologist and Hepatologist at the Pantai Hospital Ayer Keroh, Melaka. He was formerly Head of the Department of Medicine and Gastroenterology unit in Queen Elizabeth Hospital, Kota Kinabalu, Sabah from 1990 till 2017. He was a former National Head of Services for Gastroenterology as well as Internal Medicine in the Ministry of Health, Malaysia. He was instrumental in establishing the Postbasic GI Endoscopy Nursing programme in 2009. His interests are upper gastrointestinal bleeding, ERCP, therapeutic endoscopy, Inflammatory bowel disease and the development of Endoscopy nursing in Malaysia.



Christopher Khor Jen Lock

Dr Khor's main practice areas are in pancreato-biliary endoscopy and endoscopic resection. He has a keen interest in endoscopic quality and education, and in promoting collaboration among the regional endoscopy community. Dr Khor's external work includes regular faculty invitations to demonstrate and teach advanced endoscopy. He served as Director of the SGH Endoscopy Centres from 2013 to 2019, and as Chief of the SGH Department of Gastroenterology & Hepatology from 2015 to 2018. He is a Clinical Associate Professor at the Duke-NUS Medical School, and is credited with more than 80 Pubmed indexed publications. Dr Khor is President of the GI-TAP Society, an Asia-Pacific group focused on EUS education and the engagement of women in endoscopy. At the forthcoming Asian-Pacific Digestive Week 2025 in Singapore, he will serve as Endoscopy program director. Dr Khor is a past Chairman of the Chapter of Gastroenterologists, Academy of Medicine Singapore, and is a past President of the Gastroenterological Society of Singapore.



Somchai Leelakusolvong

Professor Dr Somchai Leelakusolvong currently is a Professor of Medicine at Gastrointestinal Division, Siriraj Hospital, Faculty of Medicine, Mahidol University, Thailand. He graduated from the Siriraj Medical School and extended his fellowship training programme in gastrointestinal disease at Sirriaj Medical School, Research fellow in Mayo Clinic, USA and Royal Adelaide Hospital, Australia. He has more than 150 international articles, abstracts and book chapters published focusing in motility disorders and endoscopy. In addition, he also received many awards including Young Investigator's Award of 10th Asian Pacific Congress of Gastroenterology (APCGE) in 1996, Distinguished Clinical Service Awards in 2022, Royal College of Physicians of Thailand (RCPT) in 2022 and Distinguished Mahidol University Awards in Service, in 2022. Currently, he is the Chairman of Department of Medicine, Siriraj Faculty of Medicine, Mahidol university and the President of Gastroenterological Association of Thailand (GAT). He was Congress President, Asian Pacific Digestive Week 2023.



Lee Yeong Yeh

Professor Dr Lee Yeong Yeh is Professor of Medicine and Consultant of Gastroenterology, Hepatology and Internal Medicine at Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia. He has authored more than 300 papers in high-impact journals including Gastroenterology and Gut, several book chapters and textbooks, and listed in the Stanford's Top 2% in the World in their respective field (citation impact in a single year). JCI Malaysia awarded him the Outstanding Young Malaysian Award in 2015 and the Top Research Scientist of Malaysia by the Academy of Sciences Malaysia in 2018. He is the senior editor of a number of journals including the Malaysian Journal of Medical Sciences. He is Immediate Past President of the Malaysian Society of Gastroenterology & Hepatology, Past Scientific Chair of Asia Pacific Digestive Week 2021 and committee member of numerous international societies.



Margareta Leong

Ms Margareta Leong is a Dietitian at Queen Elizabeth Hospital, Kota Kinabalu, Sabah. She graduated with Bachelor of Science (Dietetics) from Universiti Kebangsaan Malaysia. She has special Dietetic Clinical Interest in Dietary Management in Surgical and Dietary Management in Liver Diseases. Her certificates, among other; Registered as Allied health practitioner under section 17 of the Allied Health Professions Act 2016, Dietitian's Credentialing in specialized procedure: Pre-operative or post-operative nutrition for bowel resection, Dietitian's Credentialing in specialized procedure: Pre-operative or post-operative nutrition for gastrectomy and Dietitian's Credentialing in Specialized procedure: Dietary management in liver diseases.



Alex Leow Hwong Ruey

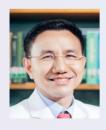
Dr Alex Leow is Consultant Gastroenterologist and Hepatologist in Pantai Hospital Kuala Lumpur and is Honorary Consultant Gastroenterologist and Hepatologist to Universiti Malaya Medical Centre, Kuala Lumpur, Malaysia. He previously worked as Associate Professor in the Department of Medicine at the University of Malaya. He obtained his basic degree in Biomedical Science in 1999 at Universiti Malaya before furthering his study in Medicine in University College Dublin, Dublin, Ireland. He graduated in 2004 and was awarded the Penang Medical Practitioner's Society Best All-Round Student Award. He obtained his master's degree in Internal Medicine and was awarded the John Bosco Best Master Student Award upon graduation in 2012. His areas of interest are diagnostic and therapeutic endoscopy, Helicobacter pylori, inflammatory bowel disease and has authored and co-authored in numerous papers in peer-reviewed journals and presented in both local and international conferences.



Lim Seng Gee

Professor Dr Lim Seng Gee is Director of Hepatology at the Division of Gastroenterology and Hepatology, National University Health System, Singapore, and was previously Chief of Division. He graduated in 1980 from Monash Medical School completed his research MD at the Royal Free Hospital. He is a member of the editorial boards for Liver International, Journal of Viral Hepatitis, Hepatology International, Alimentary Pharmacology and Therapeutics, Lancet Gastroenterology & Hepatology, and Evidence Based Internal Medicine Solutions, He is also on the Advisory Board of Gilead Sciences, Roche, Arbutus, Assembly, GlaxoSmithkline, Janssen, Sysmex, Grifols and Abbott Diagnostics.

Professor Dr Lim is currently chairman of the Singapore Hepatology Conference and Science of HBV Cure Conference, and was previously the Chairman of the Asia Pacific Association for Study of the Liver (APASL) Liver Week 2013 Congress. He served as Governing Council member from 2014-2018 of the International Association for Study of Liver (IASL), and has been appointed to the AASLD Asia Pacific Regional Advisory Council in 2018. He is also governing council board member of International Coalition for Eradication for Hepatitis B (ICE-HBV) and a steering committee member of HBV Forum. He is Scientific Advisory Board member for ANRS Maladies Infectieuses Emergentes, France. He is faculty at the Asia Pacific EBM workshop. His research includes clinical trials of new treatments for chronic hepatitis B and C, and translational research in viral hepatitis, involving molecular biology and immunology of hepatitis B. He has published 280 peer reviewed publications and secured peer review grant funding worth >SGD \$48 Million (>USD\$35M), including the award of a SGD \$25 million National Translational Clinical Research grant in 2015 to investigate eradication of HBV, which was recently renewed. In 2018 he was awarded the NMRC Clinician Scientist Award for research in HBV, renewed in 2021. His H index is 62.



Julajak Limsrivilai

Dr Julajak Limsrivilai graduated MD with first honour degree from the Faculty of Medicine, Siriraj Hospital, Mahidol University, Bangkok, Thailand, in 2003. He completed his residency in internal medicine and his fellowship in gastroenterology at the same institute in 2009 and 2011, respectively. He won the Anandamahidol scholarship award from the King of Thailand and went to do his research fellowship programme with Professor Peter Higgins, director of the IBD unit, University of Michigan from 2015 to 2017 and earned a Master's degree of science in Clinical Research Design and Statistical Analysis at University of Michigan. His field of interest is inflammatory bowel disease, intestinal infections, diarrhea and malabsorption, and small bowel endoscopy. His main publications are about the diagnosis of IBD, differentiating Crohn's from intestinal tuberculosis, role of stool GI panels in detecting infections in IBD patients with clinical flare. Furthermore, he is interested in GI infections and published articles regarding intestinal tuberculosis, gastrointestinal CMV, and intestinal capillariasis.



Marina V Maevskaya

Dr Marina Maevskaya is gastroenterologist, hepatologist and consultant at the I.M. Sechenov First Moscow State Medical University Hospital, Russia. She participant as a speaker at numerous Russian and international conferences on hepatology, is an author of 112 scientific publications (from 2013 to 2023), including 46 indexed in Scopus and Web of Science. Since 1997, she has been the Scientific Secretary, and is now the Vice-President of the Russian Scientific Liver Society (RSLS). She is also a co-developer of clinical practice guidelines in the field of hepatology designed for Russian HCPs. Since 2019, she has been a Council member of the International Association for the Study of the Liver (IASL).



Manorani K Doresamy

Ms Manorani K Doresamy is a Director of Nursing at Hospital Picaso. She has been a Nurse Manager of the Endoscopy unit at Subang Jaya Medical Centre for the last 10 years. Ms Manorani has 20 years' experience in Endoscopy Nursing.

She has Master's in Bussiness Administration (MBA) and obtained her Post Basic certificate in GI Endoscopy Nursing with distinction from Ministry of Health, Malaysia. She is currently serving as Committee member of Malaysian Society of Gastroenterology Nurses, Assistant Medical Officers & Associates (MSGNMA).



Nenny Suzanah

Ms Nenny Suzanah has worked in the healthcare industry for more than 30 years. She has 12 years' experience in nursing, and with experience in various disciplines in Singapore General Hospital (SGH) including the the ICU, surgery, orthopedics, O & G, and in ambulatory centres. The next 20 years of her career were spent in an operations and administration, and in a management and leadership capacity. Her portfolio includes research management, programme management and infrastructure development of facilities and centres in Singhealth. Ms Nenny is currently co-managing the Campus Endoscopy Centre development in Outram Campus which encompasses endoscopy centres in SGH and the new National Cancer Centre and community-based projects, and is involved in other Singhealth and institutional development projects.



Nerenthran Loganathan

Dr Nerenthran Loganathan is a Consultant Physician and Gastroenterologist at KPJ Sabah Specialist Hospital, Kota Kinabalu, Sabah. He completed his MBBS (M'LORE), FAGE (M"PAL), M.MED. INT .MED. (U.M.), CMIA(M'SIA), GCP (M'SIA) Gastroenterology(KKM). He was formerly Honorary Lecturer and Examiner for Medical Faculty, University Malaysia Sabah in 1999. While in 2009, he was a Visiting Physician to Hospital Beluran, Hospital Kota Kinabatangan, Hospital Tongod, Hospital Telupid and Fellowship of Gastroenterology and Hepatology KKM. In 2009, he was a Fellow Gastroenterology Hospital Kuala Lumpur and Fellowship training in Asan Medical Centre, Seoul, South Korea. In 2013 he was a Consultant Physician and Gastroenterologist, Hospital Kuala Lumpur and subsequently in 2015 he was a Consultant Gastroenterologist and Head of Unit Gastroenterology KPJ Sabah.



Ng Siew Chien

Professor Dr Siew Ng is Croucher Professor at the Department of Medicine and Therapeutics, New Cornerstone Investigator, Assistant Dean (Development) and Director for the Microbiota I-Center (MagIC) at The Chinese University of Hong Kong. She received her Bachelor of Medicine and Surgery degree from the University of London and the Doctor of Philosophy degree (PhD) from Imperial College London. She is at the forefront of epidemiology, genetics, pathogenesis and treatment of inflammatory bowel disease in Asia-Pacific and globally. Her recent work in the gut microbiota has transformed human health. She has identified novel gut bacteria signatures to detect colon cancer, autism and COVID-19. She has published over 370 papers in international leading journals, including Nature Genetics and Lancet. She was the first clinician-scientist in Hong Kong to be awarded New Cornerstone Investigator, bestowed with Croucher Professorship in Medical Sciences, and named Highly-cited Researcher by Clarivate for 4 consecutive years since 2020.



Norfilza Mohd Mokhtar

Dr Norfilza Mohd Mokhtar earned an honors degree in Medicine from Universiti Sains Malaysia in 1994. In 1999, she pursued a Master of Medical Science at Universiti Kebangsaan Malaysia. She subsequently obtained a Doctor of Philosophy in Molecular Medicine at the University of Cambridge, United Kingdom, under the mentorship of Professors Stephen Charnock Jones and Stephen Smith. She holds multiple administrative posts and has just finished her tenure as the Cluster Chairman for Health & Advanced Medicine, IDEA centre UKM. She is an Adjunct Professor at Arabian Gulf University, Bahrain, Visiting Professor at Management & Science University, and Medical Advisor for Cotra Sdn Bhd. She served as the President of Malaysian Society of Pharmacology & Physiology for a term. Throughout her career, she has actively seeking national and international research and industrial grants. Her research endeavours aim to advance the understanding of digestive illnesses.



Janus Ong

Associate Professor Dr Janus Ong is Associate Professor, University of the Philippines (UP) College of Medicine and Assistant to the Vice Chancellor for Research, University Philippines Manila. He has published more than 60 research articles across his interest areas in NAFLD, hepatocellular carcinoma, hepatitis B and C, complications of cirrhosis, and public health. Outside clinic hours, he works with the DOH, the WHO, the Yellow Warriors Society of the Philippines, and various professional societies on hepatitis awareness campaigns and various projects to contribute to hepatitis prevention and control. He is also a Member, Editorial Board, World Journal of Hepatology, Clinical and Molecular Hepatology, Co-editor, Philippine Journal of Gastroenterology and Consultant, Philippine General Hospital and The Medical City Pasig. He holds an MD from the UP College of Medicine, an MPH from Johns Hopkins University Bloomberg School of Public Health, and completed his IM Residency at Yale School of Medicine, Gastroenterology Fellowship at the Cleveland Clinic Foundation, and Clinical Hepatology Fellowship at the US NIH in Maryland.



Ooi Choon Jin

Dr Ooi Choon Jin obtained his MBBS from National University of Singapore and is a fellow of the Royal College of Physicians, Edinburgh and Academy of Medicine, Singapore. From 1998 to 2000, he trained at the Center for the Study of Inflammatory Bowel Disease at Massachusetts General Hospital and Harvard Medical School, USA. His past appointments, among others are Associate Professor, Duke-NUS Medical School, Clinical Associate Professor of Yong Loo Lin School of Medicine, Singapore, Chairman of the Chapter of Gastroenterologists, Academy of Medicine Singapore, President of the Gastroenterological Society of Singapore and Co-President of APDW 2011 Singapore. He is currently President of the Asian Pacific Association of Gastroenterology (APAGE), Chair for APAGE Inflammatory Bowel Disease Committee, President for Asian Education Network in Inflammatory Bowel Disease (AEN-IBD), Director of the Asian Pacific Digestive Week Federation (APDWF) and Adjunct Associate Professor at the Duke-NUS Medical School.



Ooi Wei Keat

Dr Ooi is an upper gastrointestinal and bariatric surgeon with specialized expertise in the oncological management of esophageal and gastric cancers. He completed his Master in Surgery at UKM and later underwent advanced sub-specialist training in upper gastrointestinal surgery with the Ministry of Health Malaysia.

He further refined his skills through a prestigious fellowship at Erasmus Medical Center in Rotterdam, where he was exposed to the latest techniques and innovations in upper gastrointestinal surgery.

Currently, he serves as the Head of the Upper Gastrointestinal Surgery Unit at Sabah and is the Deputy Head of Service for Upper Gastrointestinal Surgery in Malaysia. He has also help establish Queen Elizabeth Hospital as a training center for Upper GI Surgery Subspecialist Program.

In addition to his clinical and educational roles, Dr Ooi is an active member of the National Subspecialist Training Committee and also presides with the National Specialist Registry for Upper Gastrointestinal Surgery.

Dr Ooi scholarly work includes publication of a book chapter on the management of complications in esophageal surgery and articles published in leading medical journals. He is also a member of ESPEN and expert speaker for PENSMA.



Rafiz Abdul Rani

Dr Rafiz Abdul Rani graduated from University College Cork, Ireland in 2005 with further training in Ireland before joining the Faculty of Medicine, Universiti Teknologi MARA, Malaysia in 2008. He subsequently completed the postgraduate Doctor of Internal Medicine before embarking on gastroenterology training, both at Universiti Kebangsaan Malaysia. He completed a short stint in Kyoto Prefectural University of Medicine, Kyoto, Japan in 2016 and Master of Science in Health Care Policy and Management in Birmingham, United Kingdom. He currently heads the Department of Medicine in Universiti Teknologi MARA and is a council member of the College of Physicians of Malaysia. He is a member of several gastroenterology societies and was the recipient of the Japanese Society of Gastroenterology Research Fellowship Award in 2016, exploring the fundamentals of early GI cancer screening utilising image enhanced endoscopy, which remains his main interest.



Krish Ragunath

Professor Dr Krish Ragunath moved from Nottingham University, UK to Australia in May 2019 under the Global Talent initiative after being appointed as Professor of Medicine at Curtin University Medical School, and Consultant Gastroenterologist at Royal Perth Hospital, Western Australia. He is an executive committee member of the Endoscopy Faculty and Research Faculty of the Gastroenterology Society of Australia (GESA). He is also Fellow of the American and Japanese Society of GI Endoscopy. He has held various leadership positions that includes; immediate past Director of Research, Curtin Medical School, immediate past chair World Endoscopy Organisation (WEO) Research committee, British Society of Gastroenterology (BSG) International Secretary 2014-18, Treasurer BSG Endoscopy committee 2016-19, advisor for National Institute of Clinical Excellence (NICE) interventional procedures subgroup and independent external advisor for the Welsh National Bowel Cancer screening programme complex polyp MDT. His clinical and research interests include advanced endoscopic imaging of the GI Tract, Endoscopic Ultrasound, Barrett's oesophagus, minimally invasive endoscopic therapy of early GI neoplasia and recently taken a special interest in Green Endoscopy. He has co-edited the BSG Barrett's oesophagus guidelines. Quality standards in upper GI endoscopy. Guidelines for the management of gastric premalignant conditions and UK oesophageal dilatation guidelines. He has performed several live endoscopy demonstrations, endoscopy training in animal models and has lectured in national and international meetings.



Rajvinder Singh

Professor Dr Rajvinder has published 150 peer reviewed papers and 11 book chapters including being a Chief Editor of 5 textbooks. Professor Dr Singh has a h-index of 42. He has been successful in obtaining more than AUD 3 million in grants including grants from the Cancer Council and Cancer Australia to further investigate the utility of novel endoscopic imaging techniques in the detection of dysplasia and early cancer in Barrett's Oesophagus. In 2015, work on the investigation of the utility of serum biomarkers for colon cancer was selected as the top 10 best medical research initiatives in the country by the National Health and Medical Research Council (NHMRC, Australia). In 2019, work on Artificial Intelligence in the diagnosis of colorectal polyps was selected as 1 of 3 nominees for the Minister's Innovation Award. He is actively involved in teaching undergraduate and postgraduate students. Professor Dr Singh is an internationally renowned Endoscopist and is frequently invited to conduct basic and advanced endoscopy workshops. He has participated in more than 200 workshops/ symposiums. He has had speaking engagements and 'live' endoscopy demonstrations around the world including in Australia, the United States, the United Kingdom, Japan, Korea, India, Singapore, New Zealand, Indonesia, Taiwan, Hong Kong, Thailand, Vietnam, Malaysia, Myanmar, Saudi Arabia, Bangladesh, Ukraine, UAE, Brazil and the Philippines amongst other countries.



D Nageshwar Reddy

Dr D Nageshwar Reddy published over 1065 peer reviewed research papers and has contributed to more than 50 GI textbooks.He's the only Endoscopist in the world who received 5 ASGE (American Society of Gastrointestinal Endoscopy) Crystal Awards.

Honors and Awards, among others are B C Roy Award from the Indian Medical Council in 1995, PADMA SHRI AWARD from the Government of India in 2002, PADMA BHUSHAN AWARD from the Government of India in 2016, Fellow of the National Academy of Medical Sciences, New Delhi in 2001, Master Endoscopist Award from American Society of Gastrointestinal Endoscopy in 2009, American Society of Gastrointestinal Endoscopy International Leadership Award in 2011, Master of World Gastroenterology Organization from World Gastroenterology Organization in 2014, Fellow of the American Association for the Advancement of Science (AAAS) 2020, Fellow of the American Gastroenterological Association (AGAF) in 2020, American Society of Gastrointestinal Endoscopy President's Award 2020, American Gastroenterological Association distinguished educator award 2021, Rudolf Schindler award for Gastrointestinal Endoscopy (American Society of Gastrointestinal Endoscopy) 2021 (only two non Americans have been ever given this award), WEO Lifetime Achievement award 2022, Inventor of 'NAGI STENT' and awarded with the Johns Hopkins University's Prestigious 'Captain's Chair' 2024.



Rosalin Sulit

Ms Rosalin Sulit is an active member and currently the Vice President of Malaysia Society of Gastrointestinal Nurses, Medical Assistant and Associates (MSGNMA). She has contributed enormously to the development of Gastrointestinal Assistants (GIA) in Malaysia. She is the pioneer in the setting up of the first Post Basic Gastrointestinal Endoscopy Nursing in Malaysia in 2009 under the Ministry of Health Malaysia while still with the Training Institute Kota Kinabalu as a nursing tutor, she had been invited to present many talks at local and international levels and has played a major role in the setting up of MSGNMA. Quality Assurance in Endoscopy is her passion and she aspires to see more nurses and GIAs progress and be more confident in sharing and projecting the image of GIAs locally and at international level.



Ruveena Bhavani Rajaram

Dr Ruveena Bhavani Rajaram is currently a Consultant in Medicine (Gastroenterology and Hepatology) at Universiti Malaya Medical Centre, Kuala Lumpur. She completed her fellowship of Gastroenterology and Hepatology subspeciality at Universiti Malaya Medical Centre and had attachment at Liver Transplant Unit, Queen Mary Hospital, Hong Kong (21/9/2015 - 2/10/2015) and Train the Trainer (TTT) EUS Workshop, Changhai Hospital, Shanghai, China (9th - 11th October 2018). She is a member, among others, APASL ACLF Research Consortium (AARC), since 2020, Young Asia-Pacific Association of Gastroenterology (APAGE) committee member since 2022 and World Endoscopy Organization (WEO) Research sub-committee member since 2022. She also active in Clinical Research and Publication as well participate in various workshop, presentation and as invited faculty/speaker.



S Mahendra Raj

Dato' Dr S Mahendra Raj is a Consultant Physician and Gastroenterologist at Pantai Hospital Kuala Lumpur. He specializes in Internal Medicine, Gastroenterology, and Hepatology. He holds an M.B.Ch.B degree and a Doctorate of Medicine (MD) from the University of Glasgow. He is a Fellow of the Royal College of Physicians of Glasgow and the Academy of Medicine of Malaysia. He also chairs multiple committees at Pantai Hospital Kuala Lumpur and has an extensive background in teaching, examining, and research having previously held academic positions at Universiti Sains Malaysia and Universiti Putra Malaysia. His extensive experience includes having served as an examiner in Post-graduate professional exams and holding numerous leadership roles in professional committees and research initiatives.



Sharmila Sachithanandan

Dr Sharmila Sachithanandan is Consultant Gastroenterologist at the Subang Jaya Medical Centre, Kuala Lumpur, Malaysia. She graduated from the Royal College of Surgeons in Ireland (RSCI) in 1993. She is Fellow of Royal College of Physicians in Ireland (FRCPI) and Fellow of Academy of Medicine Malaysia (FAMM), Founding President of WIGNAP (Women in Gl-Network Asia Pacific), Advisory Board of Asia Pacific Neuroendocrine Society (APNETs), Editorial board - Journal of Endoscopic Ultrasound, Gastrointestinal Endoscopy (GIE), Webinar committee of the World Endoscopy Organisation (WEO), Past Director of Endoscopy (Selayang Hospital) and trainer in Gastroenterology/Endoscopy, Malaysia.

Her areas of interests include Hepato-Pancreatico-Biliary (HPB) Medicine with main interest in Endoscopic Ultrasound (EUS). She is also a recipient of several International research awards, including the American Society of Gastroenterological Endoscopy (ASGE) CRYSTAL award (2011) for Audio Visual DVD on Endoscopic Ultrasound (A Primer to HPB EUS)

She is actively involves in numerous conference and event, among others, she was invited as Speaker and Endoscopy Faculty to international conferences and publications in peer reviewed journals.



Jose D Sollano

Professor Dr Jose D Sollano, Jr, is Professor of Medicine at the University of Santo Tomas (UST) Faculty of Medicine and Surgery, Manila, the Philippines. He was also a Visiting Lecturer at the University of Arizona - Tucson School of Medicine.

After finishing his Gastroenterology Fellowship training at UST, he proceeded to train in Hepatology, Ultrasound and Interventional techniques with Professor Kunio Okuda at Chiba University, Japan and in Therapeutic Endoscopy with Professor Nib Soehendra at the University of Hamburg, Germany. He also had Visiting Fellowships in Gastroenterology at the Cleveland Clinic in Ohio and at the Mayo Clinic in Minnesota.

His research participation in international clinical drug development involved novel therapies in chronic hepatitis B, chronic hepatitis C, liver cancer and inflammatory bowel disease (IBD). In 2015, he was bestowed the Lifetime Achievement Award by the Philippine Society of Gastroenterology.

Professor Dr Sollano is a key opinion leader in Asia and has been Faculty and/or Convenor of a number of national and Asian-Pacific Clinical Practice Guidelines, including those on GERD, Dyspepsia and *H. pylori*, Gastric Cancer, Non-variceal Upper GI Bleeding, Chronic Hepatitis B, Chronic Hepatitis C, Obesity, NAFLD, Portal Hypertension, Colorectal Cancer and Inflammatory Bowel Disease.



Stephen Tsao Kin Kwok

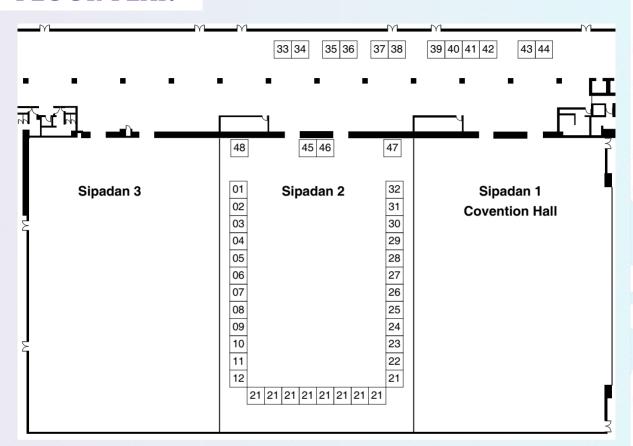
Dr Stephen Tsao Kin Kwok graduated from University of Leicester, UK in 1996. He undertook his entire basic medical training and higher specialist training (Gastroenterology and Hepatology) in the UK. In September 2008 he came to Singapore to take up a Consultant post in the Department of Gastroenterology and Hepatology at Tan Tock Seng Hospital. Since 1st September 2023 he started his new position as Senior Consultant Gastroenterologist at Aliveomedical Singapore. His subspecialty interest is in advanced therapeutic endoscopy [EMR, ESD and POEM]. He was awarded the Japanese Society of Gastroenterology Fellowship in 2010 and spent 3 months at the University Hospital Kobe, Japan. He is the Course Director of Singapore International Advance Therapeutic Endoscopy Course (SIATEC) - an annual international hands-on workshop in ESD. He is active amongst Gastroenterology fraternity, and has served in different positions in the Gastroenterology Society of Singapore (GESS). He is the current President of GESS.



Emily Wright

Associate Professor Dr Emily Wright is a gastroenterologist and Head of Inflammatory Bowel Disease at St Vincent's Hospital Melbourne. She is a principal research (NHMRC) fellow at The University of Melbourne. She is an active clinical researcher with interests including the assessment of inflammatory bowel disease (IBD) using intestinal ultrasound, the management of IBD complications including strictures, microbial manipulation and faecal transplantation for the treatment of IBD and the management of IBD during pregnancy. She has published over 50 peer-reviewed journal articles in the last six years and is a supervisor for PhD candidates in clinical and translational gastroenterology.

FLOOR PLAN



TRADE EXHIBITION

BOOTH NO	COMPANY
01	Viatris Sdn Bhd
02	Ferring Sdn Bhd
03	Boston Scientific Sdn Bhd
04	Pentax Medical Singapore Pte Ltd
05	Biomarketing Services (M) Sdn Bhd
06	BiO-LiFE Marketing Sdn Bhd
07	Novugen Pharma Sdn Bhd
08	Compai Healthcare Sdn Bhd
09	Nuvanta Sdn Bhd
10	Grifols Malaysia Sdn Bhd
11	Wellmedic Healthcare Sdn Bhd
12	Fujifilm Sdn Bhd
13	Medi Life Sdn Bhd
14	Steris Malaysia Sdn Bhd
15	AiPharma Healthcare Sdn Bhd
16	Yakult (Malaysia) Sdn Bhd
17	KL Wellness City (H) Sdn Bhd
18	Mulia Medik Sdn Bhd
19	Shenzhen Headway International Business Co Ltd
20	Olympus Sdn Bhd
21	EP Plus Group Sdn Bhd

BOOTH NO	COMPANY
22	Gene Solutions Malaysia
23	Vitramed Asia Sdn Bhd
24	Sysmex (Malaysia) Sdn Bhd
25	Orion Pharma (M) Sdn Bhd
26	Integrated Medical System Sdn Bhd
27	Camber Laboratories Sdn Bhd
28	Eisai (M) Sdn Bhd
29	Celltrion Healthcare Sdn Bhd
30	DCH Auriga Sdn Bhd
31	Ranbaxy (Malaysia) Sdn Bhd
32	First Pharmaceutical (M) Sdn Bhd
33	Servier Malaysia Sdn Bhd
34	RB (Health) Malaysia Sdn Bhd
35 & 36	Takeda Malaysia Sdn Bhd
37 & 38	Abbott Laboratories (M) Sdn Bhd
39, 40, 41 & 42	AstraZeneca Sdn Bhd
43	Johnson & Johnson Sdn Bhd
44	Hovid Pharmacy Sdn Bhd
45 & 46	Medic Pro Healthcare Sdn Bhd
47	SCI Laboratories Sdn Bhd
48	Kotra Pharma (M) Sdn Bhd

MANAGING DIFFICULT ABDOMINAL PAIN AND LOOSE STOOLS

Gwee Kok Ann

Gleneagles Hospital, Singapore

Irritable bowel syndrome (IBS) is the commonest diagnosis in patients presenting with recurring abdominal pain and diarrhea. Opioid overuse pain syndrome is the nightmare of physicians managing difficult abdominal pain. Managing IBS early, efficiently and effectively are the keys to avoiding this. We should make a positive diagnosis of IBS, define the symptom spectrum, propose an explanatory model, and set treatment targets. The ATLANTIS study informs and empowers the primary care physician to use amitriptyline early in the course of treating abdominal pain. Amitriptyline should be seen as a neuromodulator with favourable side effects of sleep promotion and anti-diarrhea. Anti-spasmodic agents may act to reduce meal related symptoms. The low FODMAP diet serves to reduce gas and diarrhea. The serotonin pathway is another therapeutic pathway, with ondansetron as a repurposed agent for abdominal pain and diarrhea. We should aim to treat comprehensively and be prepared to employ multiple treatment agents.

SYMPOSIUM 1 | Managing Difficult DGBI; Scenario-Based Discussion

HOW TO HANDLE A DIFFICULT FUNCTIONAL DYSPEPSIA AND BLOATING PATIENT

Somchai Leelakusolvong

Siriraj Medical School, Mahidol University, Bangkok, Thailand

Functional dyspepsia (FD) and bloating are challenging to manage. Both disorders have a significant negative impact on quality of life and the healthcare system. The pathophysiology of both conditions is complex and remains incompletely understood. The interplay between these symptoms can complicate diagnosis and treatment. Both FD and bloating may be exacerbated by dietary triggers, and lifestyle factors. Diagnostic procedures like endoscopy, breath tests or other investigations may be necessary to identify underlying conditions. The management of FD is composed of avoiding the trigger diet, stress management, life style modification with recommended medications such as antisecretory agents, neuromodulator drugs, prokinetic drugs, medications that can modify the duodenal inflammatory process, psychotherapy and herbal medicines. While the management for bloating are considered dietary modification such as: low Fermentable Oligo-, Di- and, Monosaccharide and Polyols, medications modified intestinal gas including antispasmodics, prokinetic drugs, gas-reducing substances, modified microbiota, neuromodulator drugs, and biofeedback for abdomino-phrenic dyssynergia. Physician needs to consider the management for both FD and bloating. Collaboration between patients and physicians is crucial to tailor a treatment plan that addresses both symptoms and their root causes, enhancing overall digestive health and quality of life.

MANAGING DIFFICULT CHRONIC CONSTIPATION

Lee Yeong Yeh

School of Medical Sciences, Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia

Based on our epidemiology data, chronic constipation is prevalent in Malaysia, affecting 13.5% of elderly in family medicine practice. Our studies also indicate that difficult constipation might be associated with chronic use of medications, Bristol stool type 1-3, a longer duration of defecation and rectal hyposensitivity. Our qualitative studies among elderly also suggest that constipation was viewed as a taboo, associated with ageing process, tended to self-manage, and associated with low health literacy. Psychological dysfunction and bloating are also common in difficult constipation. All the above should be considered when managing these patients. Phenotyping them is also paramount - slow transit, rectal sensation and presence of defecatory disorder should be determined with tests including anorectal manometry and transit tests. Patients are often refractory to conventional laxatives upon presentation; hence treatment should be tailored based upon disease phenotyping, use of prebiotic/symbiotic, prokinetics and newer laxatives, and managing psychological dysfunction.

NURSING/GIA SYMPOSIUM 1 | Infection Prevention

CURRENT AND FUTURE TRENDS IN ENDOSCOPE REPROCESSING

Nenny Suzanah

Singapore General Hospital, Singapore

The reprocessing facility is the heart of every endoscopy centre. Without quality endoscope reprocessing standards and practices, the unit will be susceptible to equipment or user-related disease transmission. Hence, one of the most important most discussed topics in endoscopy today is on quality management in endoscope reprocessing. Continuous efforts should be channeled into enhancing workflows, monitoring and assessment, evidence-based research and competency enhancements and skills training. Processes should be aligned across institutions, and multi-institutional collaborations is important to ensure that standards are maintained.

The focus areas for endoscopy centres and reprocessing facilities of today are to ensure enhanced infection control and patient safety outcomes, while the strategic priorities of these units is to be at the forefront of skills, expertise, quality management and technology while ensuring their cost-effectiveness. Apart from being at skilled and highly knowledgeable, leaders and managers of endoscopy facilities need to be future oriented and equipped to stay abreast of current and future trends, challenges and developments.

MITIGATING INFECTION RISKS IN ENDOSCOPIC PROCEDURES

Manorani K Doresamy

Hospital Picaso, Selangor, Malaysia

Establishing and maintaining general infection control guidelines within an endoscopy unit are constituent for creating a high-quality and safe environment for patients and personnel. However, significant practice variation with regard to infection control has been reported in endoscopy units across the global. Gaps are identified in both infection control and safety in endoscopy unit which includes lapses hand hygiene, personal protective equipment, injection safety, medication handling, and equipment processing. Such variation highlights the need for continued and sustained efforts by endoscopy units to ensure that infection control guidelines are maintained and enforced.

Lunch Satellite Symposium 1

RECENT ADVANCES IN GI CANCER TREATMENT - THINGS FRONTLINERS SHOULD KNOW

Eng Jie Yi

Sarawak General Hospital, Sarawak, Malaysia

This symposium will explore the evolving landscape of gastrointestinal (GI) cancer treatment, equipping frontliners with knowledge of recent advances in the GI cancer treatment landscape, with a specific focus into the Hepatocellular Carcinoma (HCC) treatment landscape.

This symposium focuses into the revolutionary developments transforming HCC management. We'll explore the paradigm shift in first-line therapy, with highlights on innovative immunotherapy combination treatment. Experts will discuss the expanding role of immunotherapy and its combination regimens, including its potential to unleash a stronger immune response against HCC. Frontliners will gain crucial knowledge on personalizing treatment regimens based on these advancements, optimizing patient outcomes in HCC.

DECODING THE INTERPLAY BETWEEN HELICOBACTER PYLORI AND GASTRO-OESOPHAGEAL REFLUX DISEASE: CLINICAL INSIGHTS AND TREATMENT APPROACHES

Chua Tju Siang

AliveoMedical, Singapore

The relationship between Helicobacter pylori (H. pylori) and gastroesophageal reflux disease (GERD) has been a subject of extensive research, debate and controversy. This lecture, titled "Decoding the Interplay Between Helicobacter pylori and Gastro-oesophageal Reflux Disease: Clinical Insights and Treatment Approaches," aims to elucidate the complex interactions between these two prevalent conditions. H. pylori, a gram-negative bacterium, is a significant etiological factor for chronic gastritis, peptic ulcer disease, and gastric cancer. Conversely, GERD, characterized by the frequent reflux of stomach acid into the esophagus, is influenced by multiple factors, including lifestyle and anatomical abnormalities.

The presentation will review the historical perspectives and evolving understanding of the H. pylori-GERD relationship, highlighting key studies and meta-analyses that have shaped current consensus. Mechanisms through which H. pylori may modulate GERD symptoms, including its impact on gastric acid secretion and mucosal inflammation, will be explored. Diagnostic and treatment strategies for both H. pylori infection and GERD will be discussed, emphasizing the clinical implications of H. pylori eradication in GERD patients. The lecture aims to provide clinicians with a deeper understanding of the interplay between H. pylori and GERD, guiding effective management strategies.

UDCA (URSOSAN) IN PREVENTING ATHEROSCLEROSIS, STEATOSIS AND LIVER FIBROSIS IN MASLD (NAFLD) PATIENTS

Marina V Maevskaya

Sechenov University, Moscow, Russia

The experience of Russian guidelines "Management of Non-Alcoholic Fatty Liver Disease" creating is presented.

The place of Ursodeoxycholic acid (UDCA) in the pharmacotherapy of NAFLD and its comorbidity is highlighted. UDCA is recommended at a dose of 13-15 mg/kg/day in patients with NAFLD in order to reduce the lipid content in hepatocytes, inflammation and prevent the progression of fibrosis. This is evidenced by systematic reviews and meta-analyses. UDCA acts as autophagy activator, antioxidant and anti-apoptotic agent. The results of international open noncomparative multicenter study called USPEH is presented. It has been shown that UDCA (Ursosan) administration at a daily dose 15mg/kg body weight during 6 months improve liver tests, decrease steatosis and inflammation, reduce risk of liver disease progression, decrease the 10-years risk of atherosclerotic cardio-vascular diseases in woman.

Co-administration of UDCA with statins, antidiabetic medications may get additional benefit in certain patients. Administration UDCA in patients with weight loss prevents gallstones formation. All this data has put in the number of Russian Guidelines statements. The safety level of UDCA is very high.

L1

BEST PRACTICES FOR THE MANAGEMENT OF CLEAN AND DIRTY SPACES

Benoit Biousse

ECOLAB Singapore, Singapore

Fast and well managed scope cleaning is usually the priority in our mind when we talk about scope reprocessing. Although, maintaining a 'dirty-to-clean' flow of endoscopes and equipment in the reprocessing and equipment areas is a key component to avoid cross contamination and therefore shouldn't be overlooked.

In this lecture we will discuss the different guidelines related to managing the reprocessing and procedure room layout and talk about the risk associated with the miss management of those spaces.

The aim of this lecture is to arm you with the tools to review your current setting so you can identify any gaps you may have and build toward the gold standard of patient safety.

THE EVOLVING ROLE OF NURSES/GIAS IN THE MANAGEMENT OF GASTROINTESTINAL BLEEDING

Jayaram Menon

Pantai Hospital Ayer Keroh, Melaka, Malaysia

Upper gastrointestinal bleeding (UGIB) is a gastrointestinal emergency that carries significant morbidity and mortality. There has been an overall decrease in peptic ulcer disease as a cause of UGIB and increase in the prevalence of other etiologies including vascular lesions and malignancy. Risk assessment and patient stratification are crucial prior to endoscopy. Resuscitation including hemodynamic stabilization together with an appropriate blood transfusion strategy, acid suppression with proton-pump inhibitors and urgent endoscopy within 24 hours is vital. Endoscopy nurses should be familiar with the various endoscopic therapeutic modalities in both non-variceal as well as variceal UGIB. Effective communication between all members of the endoscopy team is essential to high quality care. The use of endoscopy checklists can significantly improve the quality of care in UGIB. Pre-, intra- and post-procedural monitoring is crucial. A comprehensive handover between endoscopy and ward nurses is essential. Rebleeding can occur in up to 25% of patients and may require repeat endoscopic haemostasis, transcatheter arterial embolization or surgery.

L3

QUALITY ASSURANCE IN ENDOSCOPY UNIT

Krish Ragunath

Royal Perth Hospital, Perth, Australia

Endoscopy is a key investigation to investigate digestive diseases and is a power tool for its treatment. It is operator dependant and Endoscopy standards can vary between endoscopists and endoscopy units. Sub-standard endoscopy will have a negative impact on patient healthcare outcome. This in turn will have an impact on patient experience, satisfaction & confidence. Quality Assurance (QA) is the maintenance of a desired level of quality in a service or product, especially by means of attention to every stage of the process of delivery or production. The term QA traditionally relates to industry and manufacturing. However, in recent years healthcare is managed and delivered as in industry standards that reduces variation in practice and healthcare outcomes. In this lecture I will aim to cover the implementation of quality standards in endoscopy unit and continuous monitoring of performance. Within the health care system 3 different quality levels can be defined: structure, process and results or outcomes. Recommendations are based on the available evidence for the structure quality (requirements for equipment, human resources) as well as for the process quality (patient referral, preparation, conduct, documentation) and result quality (follow-up of specific endoscopic procedures). Reviewing these pillars of quality management is the key to a successful endoscopy unit.

EDUCATION AND TRAINING IN ENDOSCOPY

Nenny Suzanah

Singapore General Hospital, Singapore

The hallmark of a high-performing healthcare team is their ability to collaborate effectively with different healthcare professions to provide effective patient care. As patient care becomes more complex, renowned hospitals and educational institutions continue to work collaboratively through interprofessional education initiatives to improve the outcomes and quality of patient care through team-based simulated learning. Typically, for endoscopy, there is competing demands such as manpower challenges and time constraints as staff needs to attain a desired level of competency within an optimal time frame. Given the presenting challenges, the key to boosting procedure-based skillsets is through a multi-disciplinary collaboration approach in interprofessional learning and skills training. Comprehensive in-house interprofessional trainings are conducted monthly to aid nurses in understanding the procedures from both medical and nursing perspectives, learning about doctors' intra-procedure expectations and challenges, and improving their teamwork so that patient safety could be enhanced and optimised.

NURSING/GIA SYMPOSIUM 2 | Case Discussion - Endoscopy Patient Management

QUALITY MANAGEMENT OF PATIENTS UNDERGOING ENDOSCOPY: CHALLENGES, ISSUES, AND STRATEGIES FOR MANAGEMENT

Rosalin Sulit

Queen Elizabeth Hospital, Kota Kinabalu, Sabah, Malaysia

Many challenges and issues in the management of patients undergoing endoscopy procedures are faced by patients themselves, at the institutions and hospitals level, with the physicians and endoscopists and the nursing auxillary staff.

The topic will explore these various challenges and issues at local level and to share the various strategies in overcoming them in ensuring patients have a pleasant and unforgetable experience at the various government and private hospitals.

THE GREAT DOWNHILL RACE: FROM GUT CHAOS TO HAEMORRHOIDAL HAVOC

Alex Leow Hwong Ruey

Pantai Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

Diarrhoea frequently indicates gut microbiota dysbiosis, where the equilibrium of intestinal flora is disturbed. Such imbalance may stem from infections or antibiotic use, potentially precipitating functional gastrointestinal disorders and immune reactions. Probiotic therapy, particularly with SB CNCM I-745, emerges as a groundbreaking strategy for managing diarrhoeal illnesses by re-establishing gut microbiota harmony. This specific probiotic has proven effective in mitigating dysbiosis and shows potential as both a preventive and therapeutic agent for antibiotic-associated diarrhoea and Clostridium difficile infection. Moreover, SB CNCM I-745 has been shown to alleviate diarrhoeal symptoms and shorten hospitalisation durations among patients presented with acute gastroenteritis. In addition, utilisation of probiotics is also one of the strategies to minimise the occurrence of post-infection irritable bowel syndrome.

SYMPOSIUM 2 | Managing Difficult IBD

COMPREHENSIVE UPDATE ON THE TREATMENT STRATEGIES AND PERSONALISED CARE IN ULCERATIVE COLITIS

Ooi Choon Jin

Gleneagles and Farrer Park Medical School, Singapore

Difficult to treat IBD always pose challenges to both the patient and physician. In Ulcerative colitis, strategies to identify high risk patients, identify disease complications, EIMs and comorbidities from the very start may help impact outcomes. In high-risk patients, treating early with either accelerated step up or upfront advanced therapy (ADT) may be necessary.

A meticulous schedule to monitor response at appropriate time points and being nimble at adjusting the medications, be it monotherapy or combinations will the rigeur.

Options for difficult to treat ulcerative colitis entailed use of careful sequencing and combinations of biologics. The advent of small molecules which include Tofacitinib, Upadacitinib and Etrasimod are welcomed additions to our treatment armamentarium. Be that as it may, patient buy in and managed expectations along with their PROs remain integral pieces to the overall successful management of difficult to treat IBD.

COMPREHENSIVE UPDATE ON THE TREATMENT STRATEGIES AND PERSONALIZED CARE IN CROHN'S DISEASE

Ng Siew Chien

The Chinese University of Hong Kong, Hong Kong

Crohn's disease develops via convergence of genetic, environmental, microbial and immunological factors. Although conventional anti-inflammatory or immunomodulatory are useful in many cases, elucidating the pathogenesis has facilitated developments of disease-specific therapies for refractory cases. With a greater understanding of the multiple overactive signaling pathways of the gut mucosal immune response and enhanced leukocyte trafficking, several biological agents or small molecule drugs following the first novel biologic, anti-tumor necrosis factor α (anti-TNF α), have been developed including adhesion molecules, sphingosine-1-phospate receptors, cytokines (IL-12/23, TL1A, and IL-36), Janus kinase (JAK), and phosphodiesterase. Although preceding biological agents have dramatically changed the IBD treatment strategy, many patients still require alternative therapies due to failure or side effects. Newer treatments are now expected to be provided for better efficacy with an improved adverse event profile. In this talk, I will share data on translational studies that have highlighted the new therapeutic concept potential, efficacy of new drugs , their portioning and their role in personalised medicine.

INTESTINAL ULTRASOUND FOR IBD - OLD TOOLS FOR NEW ROLES

Emily Wright

St Vincent's Hospital, Melbourne, Australia

Inflammatory bowel disease (IBD) care must be dynamic. There is increasing focus on the need for frequent, non-invasive monitoring of disease activity in Inflammatory Bowel Disease (IBD) to assess disease activity and extent and to allow for optimal treatment. This has been shown to reduce the risk of complications and long term disability for patients. Frequent radiologic imaging to diagnose and detail the extent and severity of IBD has become important, with the aim of treatment being the absence of inflammation or mucosal normality, rather than the resolution of symptoms alone. When these endpoints are achieved there is a reduction in IBD related complications such as hospitalisation and surgery. The best imaging modality to monitor disease activity, and how often this should be repeated, is an important question.

Computer tomography (CT) and magnetic resonance imaging (MRI) are the most available current imaging modalities for disease assessment. CT is associated with ionising radiation exposure and is, therefore, an inappropriate modality for regular use. MRI is costly and access can be difficult. Intestinal ultrasound (IUS) is a cost effective, non-invasive, radiation-free and easily accessible imaging method which allows transmural assessment of the bowel wall. Many studies now support the sensitivity and specificity for IUS in the diagnosis and assessment of IBD, accuracy is comparable to that of CT and MRI. I will discuss the utility of IUS, performed by gastroenterologists in the point-of-care setting, for patients with IBD and how this may improve outcomes. I will discuss how IUS has been used as a successful endpoint in IBD clinical trials and how best this can be used in the future.

I will also discuss transmural healing in Crohn's disease in particular, and the advantages and challenges of adopting this as a potential treatment target.

STAFF ENGAGEMENT - TIPS AND TRICKS FOR BETTER TEAMWORK

Manorani K Doresamy

Hospital Picaso, Selangor, Malaysia

Anyone who has worked in a healthcare setting understands the power of teamwork. Stress, frustration and disengagement can have a negative impact on collaboration as it leads employees to question their ability to make a difference rather than investing their effort for the greater good. That's why engagement and teamwork go hand-in-hand. Working in effective teams improves clinical outcomes, increases professional satisfaction, and provides crucial peer support. However, teamwork as a core value is often missing in health care, limiting the benefits we achieve. Teamwork requires more than just communication skills, coordination, or even mutual goals. As a guiding principle, effective teamwork requires a collaborative and engaged mindsets.

Tea Satellite Symposium 4

PPI USE: AN APPROACH TO SAFE DE-PRESCRIBING

S Mahendra Raj

Pantai Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

De-prescribing proton pump inhibitors (PPIs) involves safely reducing or stopping their use in patients who may no longer need them. PPIs are commonly prescribed for conditions including acid reflux and peptic ulcers. However, long-term use can lead to potential side effects and unnecessary medication use. There are several safe approaches to de-prescribe PPI and may potentially reduce the risk of long-term PPI use and manage the rebound acid hypersecretion among patients.

MANAGEMENT IN CROHN'S DISEASE: WHICH COMES FIRST?

Julajak Limsrivilai

Siriraj Hospital, Mahidol University, Thailand

Inflammatory bowel disease (IBD), including Crohn's disease and ulcerative colitis, is a chronic inflammatory disorder of the gastrointestinal tract. The management of IBD has evolved significantly over the past decade due to advancements in diagnostic techniques, therapeutic strategies, and understanding of the disease pathogenesis. This presentation aims to provide a comprehensive update on the evolving treatment outcome and recent advances in IBD management with ustekinumab, including real-world evidences and real-life clinical experiences. By staying up-to-date with these advancements, clinicians can make informed decisions and provide the best possible care for patients with IBD.

Lunch Satellite Symposium 4

TREATMENT SEQUENCING FOR OPTIMAL DISEASE CONTROL IN CROHN'S DISEASE

Ng Siew Chien

The Chinese University of Hong Kong, Hong Kong

Crohn's disease (CD) is a chronic, immune-mediated inflammatory condition that can lead to cumulative bowel damage and debilitating complications if left uncontrolled. Traditional management strategies have often focused on symptom control alone, failing to prevent disease progression. Emerging evidence suggests that up to 50% of patients in clinical remission continue to have ongoing, subclinical inflammation. To address these limitations, the management of Crohn's disease has shifted towards a "treat-to-target" approach. This strategy aims to rapidly induce and maintain steroid-free remission, control both patient symptoms and objective inflammation, as well as ultimately alter the natural course of the disease and improve long-term outcomes. In this talk, I shall explore the factors that guide treatment sequencing for optimal disease control in Crohn's disease. We will discuss the role of patient characteristics, disease phenotype, prognostic markers, and the expanding therapeutic armamentarium in informing personalized treatment strategies.

GUT MICROBIOME RESEARCH IN MALAYSIA

Norfilza Mohd Mokhtar

Hospital Canselor Tuanku Muhriz, Pusat Perubatan Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

The filed of gut microbiome research in Malaysia has expanded significantly, owing to the advancements in technology and a growing understanding of the role of microbiome in health and disease. Malaysian research has concentrated on understanding on the complex interactions that exist between gut microbiota and host physiology, with particular attention to diet, lifestyle, and cultural practices that are unique to this region. Recent study has shown that the significant impact of traditional Malaysian diets on the composition and functionality of gut microbiota. Research into the microbiome's role in prevalent diseases, such as obesity and Type II diabetes has yielded promising biomarkers. Furthermore, studies on emerging gastrointestinal disorders including inflammatory bowel disease and young colorectal cancer have revealed potential therapeutic targets. The integration of multi-omics methods has allowed for a more in-depth investigation of microbial pathways and host-microbe interactions. Collaborative efforts between academic institutions and healthcare providers have facilitated the translation of research findings into clinical applications, including probiotic interventions. However, challenges remain, including the need for larger, more diverse population studies and standardised methodologies. As Malaysia expands its research capacities, the potential of ground-breaking findings in gut microbiome promises for improving public health and informing global microbiome initiatives.

TRANSFORMING MICROBIOME MODULATION: FROM BENCH TO BEDSIDE

Ng Siew Chien

The Chinese University of Hong Kong, Hong Kong

Research into the gut microbiota and its role in health and disease has expanded rapidly in the past two decades. Microbial dysbiosis (a shift away from a balanced composition) is implicated in a number of conditions and diseases ranging from cancer to inflammatory bowel diseases (IBD) and infectious diseases including Covid-19 and its sequelae long Covid. Currently, efforts are under way to provide functional insights into the gut microbiota and its mechanisms of action, improve understanding of the role of the microbiota beyond the gut and advance the development of microbiota-based therapeutics so that the microbiome can be applied in the clinical setting. In this talk, I will highlight our work during the pandemic on the development of a microbiota based solution for covid-19 and long covid and our journey in conducting clinical trials to demonstrate how Microbiome modulation can improve symptoms of long covid and their promising role in other diseases affecting the gut-brain axis.

FUNCTIONAL DYSPEPSIA: TREATMENT ACCORDING TO SUBTYPE VERSUS EMPIRICAL PROTON PUMP INHIBITOR

Chuah Kee Huat

Universiti Malaya Medical Centre, Kuala Lumpur, Malaysia

Functional dyspepsia (FD) stands as one of the most prevalent disorders within the spectrum of gut-brain interactions, affecting adults both in community settings and among those seeking primary and secondary healthcare. While FD itself does not pose a direct mortality risk, its persistent symptoms and the associated psychological distress significantly diminish the health-related quality of life for affected individuals, leading to heightened healthcare resource utilization.

FD manifests in two primary subtypes distinguished by symptoms and presumed underlying causes: epigastric pain syndrome (EPS) and postprandial distress syndrome (PDS). According to guidelines from the American College of Gastroenterology, proton pump inhibitors (PPIs) are recommended as the initial treatment for FD, regardless of subtype. However, recommendations from the Asian and Rome consensus reports advocate for a subtype-specific approach to management, suggesting prokinetic therapies for PDS and PPIs for EPS.

This talk focuses on the management strategies for functional dyspepsia, exploring the advantages and drawbacks of various treatment approaches. By considering subtype-specific treatments, healthcare providers can tailor interventions to address the unique symptom profiles and pathophysiological mechanisms underlying FD, thereby optimizing patient outcomes and improving their overall quality of life.

HEPATOPROTECTION REDEFINED: THE ROLE OF SAME IN LIVER DISEASES

Ruveena Bhavani Rajaram

Universiti Malaya Medical Centre, Kuala Lumpur, Malaysia

S-adenosyl-I-methionine (SAMe) which was discovered by Giulio Cantoni in early 1950s, plays a very important role as the precursor in multiple cellular reactions. SAMe is required for the synthesis of glutathione and for methylation of nucleic acids, phospholipids, histones, biogenic amines, and proteins. SAMe synthesis is depressed in chronic liver disease and so there has been considerable interest in its utility to ameliorate disease severity. Since its discovery, SAMe has been advocated as a liver supplement but over the years there has been some clinical data to substantiate its usage beyond the realm of hepatoprotection. Hence, the clinical indication (and limitation, if any) of SAMe for intrahepatic cholestasis and chronic liver disease will be discussed comprehensively.

L10

NUTRITION IN PATIENTS WITH INFLAMMATORY BOWEL DISEASES

Margareta Leong

Queen Elizabeth Hospital, Kota Kinabalu, Sabah, Malaysia

Inflammatory bowel disease (IBD), predominantly ulcerative colitis (UC) and Crohn's disease (CD), is now common in the entire developed world. Malnutrition is a considerably greater problem in CD given its capacity to affect any part of the gastrointestinal tract, unlike UC, which is restricted to the colon and has few direct malabsorptive effects. In both UC and CD malnutrition may be the result of reduced oral intake, increased nutrient requirements, increased gastrointestinal losses of nutrients, and occasionally from drug-nutrient interactions. Obesity has not been associated with IBD in the past, however nowadays obesity epidemic does not stop in the IBD population and, even more important, obesity might worsen the outcome of IBD. Nutritional care is important in the treatment of patients with IBD and includes prevention of malnutrition and micronutrient deficiencies. Supportive medical nutrition therapy (oral nutritional supplements (ONS), EN, or PN is indicated in patients with IBD especially when oral food intake is insufficient. ONS is the first step but generally is a minor supportive therapy used in addition to normal food.

ACUTE-ON-CHRONIC LIVER FAILURE (ACLF): WHAT A GASTROENTEROLOGIST NEEDS TO KNOW

Sakkarin Chirapongsathorn

Phramongkutklao College of Medicine, Bangkok, Thailand

Acute-on-chronic liver failure (ACLF) is a severe clinical syndrome characterized by an acute deterioration of liver function in patients with pre-existing chronic liver disease, often leading to multi-organ failure and high short-term mortality. Management primarily focuses on identifying and treating the precipitating cause, providing supportive care, and preventing complications. The primary objectives of intensive care management for patients with ACLF include swiftly identifying and addressing triggering events such as infections, severe alcoholic hepatitis, and bleeding. Additionally, there is a strong emphasis on vigorously supporting any failing organ systems. This approach ensures that patients either remain viable candidates for liver transplantation or recover successfully. While the ICU treatment for some complications mirrors that of the general ICU population, it varies significantly for others. Since liver transplantation for ACLF is a rapidly developing field, optimal management of these critically ill patients is best achieved by multidisciplinary teams specialized in hepatologist team, critical care and transplant medicine.

KEEPING MY CIRRHOTIC PATIENTS "WELL" - CURRENT BEST PRACTICE

Janus Ong

University of the Philippines College of Medicine, Philippines

Compensated cirrhosis, while asymptomatic, is a critical stage in liver disease progression that necessitates proactive management to prevent decompensation and improve patient outcomes. This presentation focuses on the current best practices for maintaining well-being in compensated cirrhotic patients. We will delve into the understanding of compensated cirrhosis, emphasizing the importance of early detection and intervention for potential reversibility.

Key strategies will be discussed, including strategies for preventing further liver damage through vaccinations, lifestyle modifications, and targeted treatments for underlying causes. Surveillance for potential complications like variceal bleeding and hepatocellular carcinoma will be highlighted, emphasizing the importance of early detection and intervention.

Screening for malnutrition and frailty/sarcopenia will be discussed. We will also discuss the significance of psychosocial well-being in this patient population and present strategies for identifying and addressing often overlooked but important concerns in cirrhotics.

IDENTIFYING POTENTIAL LIVER TRANSPLANT CANDIDATES - WHO, WHEN AND HOW?

Haniza Omar

Selayang Hospital, Selangor, Malaysia

Organ transplantation is a medical procedure in which an organ is removed from one body and placed in the body of a recipient, to replace a damaged or missing organ.

Liver transplant should be considered in any patient with end-stage liver disease, in whom the transplant would extend life expectancy beyond what the natural history of underlying liver disease, and in whom liver transplant is likely to improve the quality of life.

The first human liver transplant Thomas E Starlz in 1963. In Malaysia the first liver transplant was done in 1995.

Indication of liver transplant includes decompensated Chronic liver disease and conversely acute liver failure and acute on chronic liver failure. Priority on the waiting list are based on scoring system, severity of liver disease and waiting time. The timing of transplant is crucial to balance the risk of surgery and immunosuppression before life-threatening systemic complications occur.

Long term management is important for patient survival and dealing with side effects of immunosuppression.

EPIDEMIOLOGY OF HEP B, C AND MAFLD IN SOUTHEAST ASIA

Sakkarin Chirapongsathorn

Phramongkutklao College of Medicine, Bangkok, Thailand

The epidemiology of Hepatitis B (HBV), Hepatitis C (HCV), and Metabolic Associated Fatty Liver Disease (MAFLD) in Southeast Asia is shaped by diverse public health landscapes, genetic predispositions, and lifestyle factors across the region. HBV remains a significant public health issue in Southeast Asia, with prevalence rates varying widely among countries. It is considered hyperendemic in many parts of this region, with prevalence rates exceeding 8% in countries like Vietnam and Myanmar. The transmission of HBV is predominantly perinatal (mother-to-child) and horizontal (child-tochild). Vaccination policies have been crucial in managing HBV spread, and countries like Thailand have seen significant declines in new cases due to effective vaccination programs. HCV also presents a major challenge in Southeast Asia, with prevalence generally lower than HBV but still significant. Prevalence rates vary, typically around 1-2% but can be higher in certain populations such as intravenous drug users and those receiving long-term hemodialysis. Efforts to combat HCV have been hampered by the asymptomatic nature of the disease, which leads to late diagnosis and treatment. The introduction of direct-acting antivirals has significantly improved treatment outcomes, although access to these treatments varies across the region. MAFLD, formerly known as non-alcoholic fatty liver disease (NAFLD), is rapidly becoming a major health concern in Southeast Asia, paralleling the rise in obesity and type 2 diabetes rates due to urbanization and changes in diet and lifestyle. The prevalence of MAFLD in the general population is estimated to be around 25-30% in some urban areas, making it the most common liver disorder in the region. The disease is closely associated with metabolic disorders such as obesity, diabetes, and dyslipidemia.

SIX MORE YEARS - OUR ROLES TO GET THE HCV ELIMINATION GOAL POSTS

Janus Ong

University of the Philippines College of Medicine, Philippines

Hepatitis C virus (HCV) elimination by 2030 is an ambitious goal set by the World Health Organization (WHO). Gastroenterologists and hepatologists have a critical role in achieving the World Health Organization's 2030 Hepatitis C elimination goals. They can contribute by expanding access to testing and treatment through decentralization and training of non-specialists. Their role in drafting simplified algorithms of treatment with direct-acting antivirals further supports this goal. Gastroenterologists can also address gaps and inequities by targeting the screening, diagnosis, and treatment of high-risk populations. Collaboration with public health authorities and continued research and innovation are also vital in this endeavor. While the elimination of Hepatitis C by 2020 will require a multisectoral approach, gastroenterologists and hepatologists do play a key role in the multifaceted approach needed to eliminate Hepatitis C by 2030.

SYMPOSIUM 5 - Managing Hepatitis B, Hepatitis C and MAFLD

NON-INVASIVE TEST USE & UPDATE THERAPY FOR MALFD

Chan Wah Kheong

Universiti Malaya Medical Centre, Kuala Lumpur, Malaysia

Metabolic dysfunction associated fatty liver disease (MAFLD) is commonly seen in the general population. Only a small proportion of patients with MAFLD have more severe liver disease and are at increased risk of liver-related complications and mortality. A two-step approach using simple fibrosis score (i.e., fibrosis-4 index) followed by liver stiffness measurement, when needed, is widely used to identify patients with MAFLD and more severe liver disease to be referred for specialist care. Patients with MAFLD and less severe liver disease can remain in primary care where they are best managed. The concept of compensated advanced chronic liver disease and clinically significant portal hypertension provides a practical approach in using liver stiffness measurement for risk stratification in the management of patients with MAFLD. Resmetirom, an oral, liver-directed, selective thyroid hormone receptor-β agonist, is the first FDA-approved drug for treatment of metabolic dysfunction associated steatohepatitis with F2-F3 fibrosis. Other promising agents include glucagon-like receptor-1 (GLP-1) agonist, alone or in combination with glucagon agonist or glucose-dependent insulinotropic peptide agonist, fibroblast growth factor-21 agonist, and peroxisome proliferator-activated receptor agonist. While awaiting these new agents to be available, the use of vitamin E, pioglitazone and sodium glucose co-transporter-2 inhibitor may be considered.

STATE-OF-ART LECTURE 1

TRANSITIONING TOWARDS SUSTAINABLE CARE & GREEN ENDOSCOPY: A CATALYST FOR CLINICAL EXCELLENCE

Ang Tiing Leong

Changi General Hospital, Singapore

Knowledge of the health-related burden of climate change and the potential transformative health benefits of climate action is important. The 5Rs principle of effective waste management can guide solutions for sustainability in gastrointestinal endoscopy. Appropriate indication and adherence to guidelines reduces carbon footprint from inappropriate endoscopy. Advances in endoscopic imaging facilitates endoscopic diagnosis, decreases unnecessary endoscopy, and biopsies, while maintaining high-quality patient care. Appropriate case selection and choice of equipment optimizes therapeutic success and reduces the need for accessories and salvage treatment. Specific examples include the direct use of cholangioscopy-guided lithotripsy for difficult bile duct stones, if the assessment is that standard treatment will probably be unsuccessful, the use of endoscopic submucosal dissection over endoscopic mucosal resection if there are concerns about marginal clearance, and certainly as an option with less carbon footprint than surgery, and adopting third space endoscopy rather than surgery for treatment of functional GI disorders such as achalasia. A transition to sustainable endoscopy is not simply about doing less procedures and it should not affect the quality of patient care. It serves as a catalyst for endoscopists to improve their practice and aim for clinical excellence, while contributing to sustainable healthcare.

Tea Satellite Symposium 7

SODIUM ALGINATE - KEEPING YOUR GERD DOWN

Rafiz Abdul Rani

Universiti Teknologi MARA, Selangor, Malaysia

Sodium alginate, a compound found in seaweed has been gaining recognition for its usefulness and versatility as part of modern medicine and medical therapy. We will explore the history, mechanism and how best to utilise sodium alginate as part of the armamentarium in the management of the relatively common gastroesophageal reflux disease.

THERAPEUTIC ENDOSCOPIC ULTRASOUND: WE CAN DO IT, BUT SHOULD WE?

Christopher Khor Jen Lock Singapore General Hospital, Singapore

Endoscopic ultrasound has seen significant development and advancement from its original utility as a diagnostic tool in the early 1990. The introduction of linear echoendoscopes in the late 1990s opened the door to therapeutic EUS, beginning with EUS Celiac Plexus Neurolysis. The next wave of therapies was driven by the invention and commercialization of the first lumen-apposing metallic stent or LAMS in the mid 2010s. The current landscape of EUS therapy includes drainage of hepatobiliary and pancreatic obstruction, drainage of peripancreatic fluid collections, ablation of pancreatic cysts, creation of gastro-enteral anastomosis, and management of gastric varices. This talk will review the indications for these procedures, the risk of complications, what setting they should be done in, and the guidelines that exist for practioners.

UNDERSTANDING & ADVANCING COLORECTAL CANCER SCREENING: A COMPREHENSIVE APPROACH

Krish Ragunath

Royal Perth Hospital, Perth, Australia

Throughout the world, colorectal cancer (CRC) is the third most commonly diagnosed cancer and the second leading cause of cancer related mortality. CRC cases are expected to increase by 80% by 2035 to 2.4 million and contribute to 1.3 million deaths worldwide. In Malaysia, CRC is the second most common cancer accounting for 13.6% of all cancers (1 in 55 males and 1 in 76 females are at risk of developing CRC in their lifetime). Despite strong evidence, CRC screening remains underused. Currently, there are several options for CRC screening, each with its own performance characteristics and considerations for practice. This lecture aims to cover current CRC screening guidelines and highlight future blood-based and imaging-based options for screening. In current practice, the leading non-invasive option is the faecal immunochemical test (FIT) based on its high specificity, good sensitivity, low cost and ease of use in mailed outreach programmes. There are currently several blood-based CRC screening tests in varying stages of evaluation. There are ongoing studies on the diagnostic accuracy and longitudinal performance of blood tests and they have the potential to disrupt the CRC screening landscape. Imaging-based options, including the colon capsule, MR colonography and the CT capsule, are also being tested in active studies. We are still recovering from the COVID-19 pandemic with long wait times for routine colonoscopy procedures. Increasingly several countries are moving to reduce the screening age to 45 years that poses immense challenges to the endoscopy service. At this stage, accurate non-invasive screening options will be increasingly important to explore.

YOUNG INVESTIGATOR AWARDS

ID 008 PREVALENCE OF METABOLIC DYSFUNCTION-ASSOCIATED FATTY LIVER DISEASE IN MALAYSIA AND THE ASSOCIATED FACTORS

<u>Kim Sui Wan</u>¹, Wah-Kheong Chan², Halizah Mat Rifin¹, Muhammad Fadhli Mohd Yusoff¹, Kishwen Kanna Yoga Ratnam¹, Shubash Shander Ganapathy¹, Hamizatul Akmal Abd Hamid¹, Masni Mohamad³, Nurain Mohd Noor³, Feisul Mustapha⁴, Noor Ani Ahmad¹

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ID 014 ASIAN-PACIFIC CONSENSUS VERSUS NORTH AMERICAN CONSENSUS IN DIAGNOSING SIBO AMONGST IBS PATIENTS: A SINGLE-CENTER PROSPECTIVE COHORT STUDY

<u>Audrey Joe Chii Loh</u>¹, Qing Yuan Loo¹, Ai Kah Ng², Xin Hui Khoo¹, Kewin Tien-Ho Siah³, Sanjiv Mahadeva¹, Kee Huat Chuah¹

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ID 047 EFFECTS OF DISEASE DURATION ON GUT MICROBIOTA COMPOSITION IN MILD TO MODERATE ULCERATIVE COLITIS: PRELIMINARY DATA

Muhammad Ikhmal Rosali¹, Raja Affendi Raja Ali^{2,3}, Norfilza Mohd Mokhtar^{1,2}, Hajar Fauzan Ahmad^{2,4}

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ID 055 A RANDOMIZED DOUBLE-BLIND STUDY ON THE USE OF NATRIEO® AS ADJUVANT THERAPY FOR NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) IN METABOLIC AND NON-METABOLIC PATIENTS

<u>Nur Illiyana Illang</u>¹, Muhammad Ikhmal Rosali¹, Raja Affendi Raja Ali^{2,3,4,5}, Norfilza Mohd Mokhtar^{1,3}, Khairul Najmi Muhammad Nawawi^{2,3}

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ID 060 COMPUTER-AIDED DETECTION VERSUS CONVENTIONAL COLONOSCOPY FOR PROXIMAL COLON POLYPS: INTERIM ANALYSIS FROM A SINGLE CENTRE RANDOMIZED TANDEM COLONOSCOPY STUDY

Nur Nadia Azman, Thevaraajan Jayaraman, Muhammad Ilham Abdul Hafidz, Annamalai Chandra Mouli, Rafiz Abdul Rani

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PREVALENCE OF METABOLIC DYSFUNCTION-ASSOCIATED FATTY LIVER DISEASE IN MALAYSIA AND THE ASSOCIATED FACTORS

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OBJECTIVE: This study aimed to determine the prevalence of metabolic dysfunction-associated fatty liver disease (MAFLD) and its associated factors among adults in Malaysia, which is important from clinical and public health perspectives, and is crucial for policymaking and resource allocation.

METHODOLOGY: This was a nationwide population-based cross-sectional study using two-stage stratified random sampling. Data collection was conducted from July to September 2023 and involved structured interviews, physical examinations, and venous blood taking. MAFLD was diagnosed based on detecting liver steatosis (based on Fatty Liver Index \geq 60) and the presence of \geq 1 of three criteria: overweight/obesity, \geq 2 metabolic risk abnormalities, or diabetes. Fibrosis-4 index \geq 1.3 (\geq 2.0 when \geq 65 years old) and >2.67 were considered as moderate and high risk of advanced liver fibrosis, respectively. Analyses were conducted using Complex Samples procedures.

RESULTS: The response rate was 71.4%, with 1,011 respondents available for analysis. The prevalence of MALFD was 28.2% (95% CI: 24.6-32.1), translated to around 6.7 million populations in Malaysia. About 9.7% and 0.7% of respondents with MAFLD were at moderate and high risks of having advanced liver fibrosis, respectively. Male sex, abdominal obesity, elevated diastolic blood pressure, alanine aminotransferase, gamma-glutamyl-transferase, triglycerides, and HbA1c were associated with higher odds for MAFLD. The Chinese ethnic group was the least likely to have MAFLD.

DISCUSSION AND CONCLUSION: Almost three in ten adults in Malaysia have MAFLD. The disease is highly prevalent and is a public health issue in the country. Urgent and decisive actions are required from policymakers, public health practitioners, and clinicians to prevent and control MAFLD in Malaysia.

ASIAN-PACIFIC CONSENSUS VERSUS NORTH AMERICAN CONSENSUS IN DIAGNOSING SIBO AMONGST IBS PATIENTS: A SINGLE-CENTER PROSPECTIVE COHORT STUDY

<u>Audrey Joe Chii Loh</u>¹, Qing Yuan Loo¹, Ai Kah Ng², Xin Hui Khoo¹, Kewin Tien-Ho Siah³, Sanjiv Mahadeva¹, Kee Huat Chuah¹

BACKGROUND: For the diagnosis of small intestinal bacterial overgrowth (SIBO) with a hydrogen breath test (HBT), the Asian-Pacific (AP) and North-American(NA) consensus have recommended conflicting cutoffs for hydrogen (H2) level, but both recognize the role of an elevated methane (CH4). We aimed to explore the clinical implications of this difference in diagnostic criteria.

METHODS: A prospective study of consecutive Asian adults with irritable bowel syndrome (IBS) from a primary healthcare setting who underwent glucose HBT was conducted. The impact of patients with SIBO diagnosed using the two consensus was compared. Additionally, the long-term outcomes of SIBO were explored.

RESULTS: A total of 90 patients were included (median age 49 years, male 41.1%, IBS-diarrhea 60.0%). SIBO was diagnosed in 44.4% and 37.8% using AP and NA consensus, respectively. Patients with IBS-constipation were associated with an elevated CH4 (40.9% vs 14.7%, p=0.009). SIBO diagnosed using both guidelines was associated with severe IBS (IBS-Symptom Severity Scale/IBS-SSS>300) (AP:32.5% vs 8.0%, p=0.003; NA:29.4% vs 12.5%, p=0.047). However, only SIBO diagnosed with AP consensus was associated with a higher median IBS-SSS score (AP:200 vs 165, p=0.009; NA:200 vs 170, p=0.087). Regardless of the guideline used, patients with SIBO had a poorer health-related quality of life (lower EQ-5D utility score, p<0.01). On follow-up, among the 26 SIBO patients who had a repeat HBT, a higher proportion of those with CH4-positive, compared to H2-positive SIBO remained positive (80.0% vs 36.4%, p=0.043).

DISCUSSION: There was no previous study on the impact of different diagnostic criteria for SIBO. This novel study justifies the use of AP consensus recommendations for diagnosing SIBO in Asia.

CONCLUSION: The AP consensus diagnostic criteria was more sensitive in diagnosing SIBO and it was associated with a more severe form of IBS. CH4-positive SIBO was more likely to be associated with IBS-C and remained positive, compared to IBS-D on follow-up.

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EFFECTS OF DISEASE DURATION ON GUT MICROBIOTA COMPOSITION IN MILD TO MODERATE ULCERATIVE COLITIS: PRELIMINARY DATA

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OBJECTIVE: Gut dysbiosis is linked to disease severity and the active or quiescent state in ulcerative colitis (UC). However, data on their relationship to disease duration is limited. The aim of this study was to investigate the impact of disease duration on gut microbiota composition, pro-inflammatory cytokines, and mucosal healing markers in patients with mild to moderate UC.

METHODOLOGY: Eighteen UC patients were divided into two groups: Group A (disease duration <10 years) and Group B (disease duration >10 years). Stools were collected for faecal calprotectin (FCAL) and 16S rRNA sequencing. Blood was analyzed for qPCR, C-reactive protein (CRP), erythrocyte sedimentation rate (ESR) and white blood cell count (WCC).

RESULTS: Linear discriminant analysis Effect Size (LEfSe) analysis revealed a positive correlation with *Phocaeicola plebeius* in Group A and *Roseburia* in Group B. No significant differences were found in proinflammatory cytokines (IL5, IL6, IL13, and TNF- α), CRP, ESR, WCC and FCAL between the two groups. The mean (SD) levels of CRP (0.55 \pm 0.60) and FCAL (151.29 \pm 273.32) indicated that the recruited patients were within the mild category.

DISCUSSION: We identified differences in the core microbiome between short-term and long-term disease durations. *Phocaeicola plebeius*, a pathogenic bacterium known for degrading mucin and thinning of the mucosal layer, has an efficient iron uptake system that provides a competitive advantage, leading to gut imbalance and inflammation. In contrast, *Roseburia* is more prevalent in patients with longer disease durations, promoting mucosal healing and reducing inflammation through adaptive enrichment. Milder UC patients have a higher abundance of beneficial bacteria, highlighting their possible protective roles in aiding mucosal healing.

CONCLUSION: In conclusion, the duration of UC influences gut microbiota composition without altering proinflammatory cytokines and mucosal markers.

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A RANDOMIZED DOUBLE-BLIND STUDY ON THE USE OF NATRIEO® AS ADJUVANT THERAPY FOR NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) IN METABOLIC AND NON-METABOLIC PATIENTS

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OBJECTIVE: Tocotrienol has emerged as a promising adjunctive therapy for non-alcoholic fatty liver disease (NAFLD) due to its potent antioxidant properties. This study aims to investigate the potential roles of tocotrienol-rich fraction vitamin E (TRF) in NAFLD patients.

METHODOLOGY: NAFLD patients, both with and without metabolic syndrome, were recruited and supplemented with TRF at doses of 100 mg and 50 mg, respectively, daily for six months. Liver health was assessed using FibroScan and LiverFAST. Additionally, proinflammatory cytokine gene expression was analyzed using qPCR, while DNA damage was evaluated using Comet Assay.

RESULTS: After six months of TRF supplementation, significant improvements were observed in liver activity among NAFLD patients. LiverFAST analysis revealed a notable decrease in steatosis and liver activity (P<0.05), at both dosages, along with reduced levels of liver enzymes (ALT, AST) (P<0.05). However, no significant changes were observed in Fibroscan measurements for either steatosis (CAP) or liver stiffness. TRF-100 supplementation led to a significant decline in proinflammatory cytokines (IL-6, IL-8, TNF- α , IFN- γ) (P<0.05) compared to TRF-50. DNA damage analysis indicated a substantial decrease in tail DNA in both TRF groups, while a significant decrease in DNA moment was observed only in the TRF-50 (P<0.05).

DISCUSSION: TRF supplementation has demonstrated significant improvements in liver health among NAFLD patients by reducing hepatic steatosis and activity. The reduction in liver fat accumulation helps lower inflammation levels, which is associated with a decline in proinflammatory cytokine activity. This reduction in liver inflammation has a direct impact on the release of reactive oxygen species (ROS) in liver cells as well as DNA damage reduction. As a result, liver cells can be restored to a healthier state, thereby improving overall liver condition.

CONCLUSION: TRF is effective as an adjunctive treatment for managing NAFLD patients with or without metabolic syndrome.

COMPUTER-AIDED DETECTION VERSUS CONVENTIONAL COLONOSCOPY FOR PROXIMAL COLON POLYPS: INTERIM ANALYSIS FROM A SINGLE CENTRE RANDOMIZED TANDEM COLONOSCOPY STUDY

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INTRODUCTION: Screening colonoscopy has had a limited impact on improving the outcomes for right sided colorectal cancers. Computer-aided detection (CADe) has been shown to improve the detection of colorectal polyps. We aimed to evaluate the polyp detection rate (PDR) in the right colon using CADe compared to conventional white light imaging (WLI) colonoscopy.

METHODOLOGY: This was a prospective randomized, tandem colonoscopy study conducted in Hospital Al-Sultan Abdullah, UiTM. Patients aged 50-70 years who were scheduled to undergo screening colonoscopy were enrolled after obtaining informed consent and were randomly assigned to first undergo CADe (CAD EYE®, Fujifilm Co, Japan) or WLI from caecum till splenic flexure, followed immediately by the other procedure in tandem by a different endoscopist who was blinded to the findings from first procedure.

RESULTS: Sixty patients were enrolled and 44 patients met the inclusion criteria with a mean age of 63.6 ±6.2 years old. There was a female gender preponderance (56.8% vs. 43.2%). The ethnic distribution was 68.2% Malay, 15.9% Indian and 15.9% Chinese. Half of the patients had a total Boston Bowel Preparation Score (BBPS) of 9 and all patients had a score of >6. The median (IQR) withdrawal time for CADe in the right colon was higher (8 (6,10) mins vs 7 (5,10) minutes). CADe had a higher PDR (72.7% vs. 56.8%, p <0.001) and higher total number of polyps detected (85 vs 72, p<0.001). All polyps were <1cm in size. CADe detected a higher number of protruded polyps (Paris 0-Ip, 0-Is) (31vs 28, p<0.001) and flat polyps (Paris 0-IIa) (47 vs 37, p<0.001).

CONCLUSION: CADe had a higher PDR and a higher number of total polyps detected in the right colon compared to conventional WLI colonoscopy.

ORAL PRESENTATIONS

ID 005 FRAGMENTED PERISTALSIS IS A MOTILITY PHENOMENON ASSOCIATED WITH AGE RATHER THAN OBESITY OR ACID EXPOSURE

Noor Purdah, Nashrulhaq Tagiling, Yeong Yeh Lee

Universiti Sains Malaysia, Kubang Kerian, Kelantan, Malaysia

ID 022 DANIS STENT FOR THE MANAGEMENT OF ESOPHAGEAL VARICEAL BLEEDING: A SYSTEMATIC REVIEW AND POOLED ANALYSIS

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ID 023 EPIDEMIOLOGY, PREDICTORS AND TREATMENT OUTCOME OF ACHALASIA IN A MULTI-ETHNIC ASIAN POPULATION WITH NON-OBSTRUCTIVE DYSPHAGIA

Ram Prasad Sinnanaidu¹, Nabilah Izham², Jun Xin Lim¹, Qing Yuan Loo¹, Ban Hong Ang¹, Naveen Ramasami², Wei Jin Wong³, Shiaw Hooi Ho¹, Sanjiv Mahadeva¹, Yeong Yeh Lee², Kee Huat Chuah¹

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ID 064 VALIDATION OF A STOOL DNA TEST UTILIZING METHYLATED SDC2 IN DETECTING COLORECTAL CANCER AMONG MALAYSIANS

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ID 071 A PROSPECTIVE OBSERVATIONAL STUDY ON THE EPIDEMIOLOGICAL PROFILE AND CLINICAL OUTCOME OF PATIENTS PRESENTING WITH UGIB AT A SINGLE CENTER IN EAST MALAYSIA

Prakash Narayanan, H A Tan, KalkiBharati, C M Lu, James Emmanuel, Raman Muthukaruppan Queen Elizabeth Hospital, Sabah, Malaysia

ID 077 CASE SERIES OF ACUTE HEPATITIS A INFECTION CAUSING ALF/ACLF WITH PREVALENCE AND OUTCOME OF THE INFECTION IN SABAH - RETROSPECTIVE OBSERVATIONAL STUDY

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FRAGMENTED PERISTALSIS IS A MOTILITY PHENOMENON ASSOCIATED WITH AGE RATHER THAN OBESITY OR ACID EXPOSURE

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OBJECTIVE: Fragmented peristalsis (FP) is an oesophageal motility disorder, often identified during high resolution manometry for various gastroesophageal symptoms but can be asymptomatic too. Its clinical significance is poorly understood, hence our study aimed to investigate the factors associated with fragmented swallows percentage (FS%) in FP.

METHODOLOGY: Symptomatic patients who underwent oesophageal high-resolution manometry at Hospital USM from 2020-2023 were retrospectively reviewed. FP is defined based on the Chicago Classification v3.0 (Kahrilas et~al., 2015) and FS% (% of FP) in each patient was determined. Associations between FS% with demographics and acid exposure time (AET) from 24-hour pH study were determined using the Spearman's ρ correlation test and univariate logistic regression.

RESULTS: Of 200 patients screened, 30 (17F, mean age: 47.8 ± 16.1 years, median body-mass-index (BMI): 24.44 ± 6.82 kg/m²) were included in final analysis. FS% was found to be significantly associated with age (ρ =0.372; P=0.043), but not BMI and sex (both P>0.05). Of 22 patients (11F, mean age: 50.1 ± 14.9 years, median body-mass-index: 23.85 ± 7.04 kg/m²) who had completed a pH study, 18 were diagnosed with gastroesophageal reflux disease and two each with reflux hypersensitivity and functional heartburn, respectively. No associations were demonstrated between FS% with AET (P>0.05).

DISCUSSION AND CONCLUSION: FS% is significantly associated with age rather than sex, obesity or AET. FP is possibly a normal physiological phenomenon contributed by the ageing process. A larger cohort is needed in future studies to prove the hypothesis.

DANIS STENT FOR THE MANAGEMENT OF ESOPHAGEAL VARICEAL BLEEDING: A SYSTEMATIC REVIEW AND POOLED ANALYSIS

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The purpose of this study was to identify and assess the available clinical evidence regarding the use of the Danis Stent (DS) for managing refractory esophageal variceal bleeding.

A search of the peer-reviewed literature was conducted in PubMed, Science Direct, Cochrane, and Web of Science databases. The review encompasses prospective, retrospective, comparative, and single-arm studies that detail the clinical application of DS for managing refractory esophageal variceal bleeding. The Methodological Index for Non-Randomized Studies was employed to evaluate the quality of the studies and the risk of bias. Clinical efficacy and safety data were extracted from the included studies and used for the pooled analysis.

Ten studies were identified that met the inclusion criteria. In total, clinical data related to 180 DS implantations were obtained. The technical success rate of stent deployment was 97.6%. Clinical success (bleeding control during 7 days of stent implantation) was achieved in 91% of cases. The most frequent complication associated with DS was migration, occurring in 20% of cases; however, only two cases were reported to result in recurrent bleeding. Additional complications included mild ulceration (6%), and bleeding following stent removal (2%). Complications such as aspiration, pain, infection, perforation, dysphagia, and hiccups had an incidence of less than 1%.

The DS outperforms the Sengstaken-Blakemore tube in clinical success (91% vs. 64.5%, p<.001). DS also reduces the risk of severe aspiration (0.5% vs 11.2%, p<.001) and enhances patient comfort by eliminating the requirement for balloon maintenance. Additionally, implantation of the DS does not require endotracheal intubation, allows oral food intake, and the DS can remain in place for up to seven days to stabilize patients before definitive treatment, unlike the short-term Sengstaken-Blakemore tube.

The pooled analysis indicates that using the DS provides a more favorable benefit-risk ratio compared to the Sengstaken-Blakemore tube.

EPIDEMIOLOGY, PREDICTORS AND TREATMENT OUTCOME OF ACHALASIA IN A MULTI-ETHNIC ASIAN POPULATION WITH NON-OBSTRUCTIVE DYSPHAGIA

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OBJECTIVES: Epidemiological data and predictors of achalasia among Asians presenting with non-obstructive dysphagia are scarce, hence our aims in the current study.

METHODOLOGY: This was a retrospective cohort study of consecutive multi-ethnic Asian patients with non-obstructive dysphagia who underwent oesophageal high resolution manometry in Universiti Malaya Medical Centre (Petaling Jaya) and Hospital Universiti Sains Malaysia (Kota Bharu). Oesophageal motility disorders including achalasia were diagnosed using the Chicago Classification v3.0. Prevalence, incidence, predictor factors (multivariate analysis) and treatment outcome were determined with p<0.05 as significant.

RESULTS: A total of 231 patients were included (mean age 53 years, females 53.2%). Prevalence of achalasia was 25% and estimated incidence was 0.46 per 100,000 people. Prevalence of subtypes of achalasia was 8.7% Type 1, 13.4% Type 2, and 2.2% Type 3 respectively. Younger age (OR 0.94, 95% CI: 0.90-0.99, p=0.009) and BMI <18.5 kg/m² (OR 18.42, 95% CI: 1.39-244.48, p=0.027) were predictors of achalasia. 63.6% underwent peroral endoscopic myomectomy (POEM) and 15.2% had pneumatic dilation. A positive symptom outcome was observed in patients who underwent POEM, ranging from 76.2% at 3 months to 75% at 2 years.

CONCLUSION: Achalasia is prevalent in Asians with non-obstructive dysphagia. A younger age and being underweight are predictive factors for achalasia. POEM is the most common intervention with a positive symptom outcome.

VALIDATION OF A STOOL DNA TEST UTILIZING METHYLATED SDC2 IN DETECTING COLORECTAL CANCER AMONG MALAYSIANS

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OBJECTIVES: Stool DNA (sDNA) testing has been a subject of interest as a non-invasive and simple screening tool for colorectal cancer (CRC). Methylated Syndecan-2 (SDC2) has been shown to be a common epigenetic change in early CRC or advanced colorectal adenomas among Asian populations. Commercially available stool DNA (sDNA) kits detecting methylated SDC2 have shown promising results in detecting early CRC and advanced colorectal adenomas in multicenter studies. This study aims to provide a validity of the performance and the predictive values of sDNA testing utilizing methylated SDC2 in detecting advanced colorectal adenomas and CRC in a Malaysian population.

METHODOLOGY: Participants from gastroenterology and surgery outpatient clinics in Hospital Kuala Lumpur were recruited during their local screening testing and clinical practice referrals for colonoscopy. Sixty consented participants were interviewed and had their symptoms recorded. They undertook a stool DNA testing using a qualitative molecular diagnostic test kit followed by a colonoscopy as standard reference. Resected polyps or biopsies from the colonoscopy were sent for histopathological studies.

RESULTS: Preliminary data showed the mean (SD) age of participants was 61.0 (10.3) years. 51.7% of the participants were females. The most common symptoms presented were altered bowel habits (35%), constipation (16.7%) and weight loss (13.3%). Three participants were diagnosed with colorectal cancer and seven with advanced adenoma size \geq 10mm. The sensitivity and specificity of this stool DNA test in detecting colorectal cancer was 100% and 86% respectively.

CONCLUSION: Further validation is crucial to ensure the test performs consistently across our multiethnic population in Malaysia. Encouraging more stool DNA testing in a larger population could potentially improve early detection of CRC and guide future decision making in healthcare policies relating to CRC screening programmes.

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A PROSPECTIVE OBSERVATIONAL STUDY ON THE EPIDEMIOLOGICAL PROFILE AND CLINICAL OUTCOME OF PATIENTS PRESENTING WITH UGIB AT A SINGLE CENTER IN EAST MALAYSIA

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BACKGROUND AND OBJECTIVES: Upper gastrointestinal bleeding (UGIB) is an emergency involving bleeding in the upper gastrointestinal tract. This study aims to provide a comprehensive overview of the clinical characteristics and the outcomes at a single centre in East Malaysia.

MATERIAL AND METHODS: This prospective observational study was conducted at a single-center tertiary care. We enrolled all consecutive patients with suspected UGIB from March 2024 to June 2024. All procedures were performed within 24 hours of clinical presentation. Data collected included age, sex, presenting symptoms, and pre-endoscopic Rockall and Glasgow-Blatchford Scores. All patients were followed up until discharge. Blood transfusion needs, length of hospital stay, rebleed rates and mortality outcomes were analyzed.

RESULTS: 113 patients were included in the study. Mean age of patients was 54 ± 14 years. 81 (71.6%) were male. The average Rockall Score was 4.46 ± 1.75 , and the Glasgow-Blatchford Score was 11.46 ± 3.15 . Blood transfusion was required in 62 patients (54.9%).80/113 patients (70.8%) had non variceal UGIB, of which 35 patients (30.4%) had Forest IIa ulcers and above, requiring endoscopic intervention. Adrenaline injection with thermocoagulation was required in 24 patients and adrenaline injection with hemoclip required in 11 patients. The remaining 33 patients with variceal bleeding were treated with endoscopic variceal ligation. Rebleeding rates occurred in 28 patients (24.8%) within 30 days. Radiological intervention was required for 2 patients (1.8%) after failed endoscopic treatment and there was 1 reported death (0.9%).

DISCUSSION: Peptic ulcer disease was the most common cause of UGIB. The Rockall and Glasgow-Blatchford Score was higher mean score of 6 and 12 respectively in both the patients who required interventional radiology procedures and both succumbed within 30 days due to sepsis. Majority of patients had successful endoscopic intervention while patients who had failed endoscopic therapy succumbed within 30 days.

CONCLUSION: This study offers insights into UGIB prevalence, etiology, and predictive outcomes in East Malaysia while affirming the need to risk stratify the patients according to existing UGIB risk scores.

CASE SERIES OF ACUTE HEPATITIS A INFECTION CAUSING ALF/ACLF WITH PREVALENCE AND OUTCOME OF THE INFECTION IN SABAH - RETROSPECTIVE OBSERVATIONAL STUDY

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INTRODUCTION: Hepatitis A is usually a benign, self-limiting disease but cases of ALF/ACLF have been reported. We aim to examine disease prevalence and outcomes while describing three such cases.

METHODOLOGY: Retrospective assessment of Hepatitis A IgM serology processed in HQE Sabah from January 2023 - July 2024. Cohort were subdivided to elevated liver-associated enzymes with no coagulopathy (ELEC), acute liver injury (ALI), acute liver failure (ALF), acute-chronic liver failure (ACLF) and acute decompensation.

RESULTS: 1296 Anti-HAV IgM test were carried out, (893) 2023 and (457) 2024 with a 3% (n=40) positive rate.

57% males (median age; 31). In 2023, all Hepatitis A cases showed ELAC with zero ALI/ACLF/deaths. In 2024, 71.5% were ELAC; 2 ALI; 1 ALF; 2 ACLF; 1 acute decompensation with 2 deaths.

CASE 1: 66-year-old lady presented with 4 days of jaundice and decreased consciousness. She was treated for hyperacute liver failure and due to severe metabolic acidosis with hyperlactemia, CVVHD was initiated. 72 hours later standard volume plasma exchange was initiated in view of persistently high SOFA/ALFED scores. Post 4 sessions of PLEX, she achieved normalization of coagulopathy, marked improvement of LFT and successful extubation. Nevertheless, she succumbed to sepsis almost two months later.

CASE 2: 35-year-old with MASLD presented with 2 weeks of jaundice and marked lethargy. He progressed to ACLF complicated with hepatorenal syndrome while in ward. Standard medical therapy was instituted and a spontaneous recovery not needing bridging therapy or transplant referral. He was discharged well.

CASE 3: 55-year-old with MASLD presented with fever, jaundice and GI losses for 7 days with clinical ascites. She was diagnosed with ACLF with grade 2 encephalopathy. Standard medical care was initiated. Though she achieved resolution of encephalopathy, she developed CRE Klebsiella infection and died.

CONCLUSION: Hepatitis A vaccination should be mandatory in liver cirrhosis and expanded to all chronic liver disease patients.

ID 002 PRIMARY NON RESPONDER TO ANTI-TNF (INFLIXIMAB) IN CROHN'S DISEASE EMPIRICALLY TREATED AS GUT TUBERCULOSIS

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ID 006 VITAMIN E IMPROVES SERUM MARKERS AND HISTOLOGY IN ADULTS WITH METABOLIC DYSFUNCTION-ASSOCIATED STEATOTIC LIVER DISEASE: SYSTEMATIC REVIEW AND META-ANALYSIS

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ID 007 ASSOCIATION BETWEEN METABOLIC DYSFUNCTION-ASSOCIATED FATTY LIVER DISEASE SUBGROUPS AND LONG-TERM OUTCOMES: A POST-HOC ANALYSIS

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ID 009 ACUTE SYMPTOMATIC HYPONATREMIA FOLLOWING SODIUM PICOSULFATE AS BOWEL PREPARATION FOR COLONOSCOPY

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ID 010 AUTOIMMUNE PANCREATITIS: AN IMPORTANT MIMICKER OF PANCREATIC CANCER

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ID 011 EUS-GUIDED ASPIRATION OF PREVERTEBRAL ABSCESS

 $\underline{Lionel\ T\ Y\ Poh}, Andrew\ K\ W\ Chang, H\ H\ Lim, D\ Balakrishnan, Victoria\ S\ L\ Kok$

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ID 012 BLACK ESOPHAGUS - UNCOMMONLY COMMON PRESENTATION OF UGIB

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ID 013 A CASE OF METASTATIC HEPATOCELLULAR CARCINOMA

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ID 015 EUS-GUIDED COIL WITH CYANOACRYLATE INJECTION THERAPY IN THE MANAGEMENT OF GASTRIC VARICES - A SINGLE CENTER CASE SERIES IN MALAYSIA

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ID 016 RETENTION OF CAPSULE ENDOSCOPY - A RARE COMPLICATION

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ID 017 INFLAMMATORY BOWEL DISEASE MIMICS

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ID 018 DOUBLE TROUBLE: WHEN CROHN'S DISEASE MEETS LYMPHOMA - STRIKING A BALANCE IN TREATMENT CHALLENGES

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ID 019 "FROM SEED TO STOMACH" TESTICULAR MASS DISGUISED AS UPPER GASTROINTESTINAL BLEEDING

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ID 020 UNVEILING THE MASK: EOSINOPHILIC COLITIS AND ITS DIAGNOSTIC CHALLENGES IN MASQUERADING AS IBD

<u>Tay Yang Zet</u>¹, Anis Amalin Binti Zolkefli ², Tan Chun Kheng¹, Tang Yuan Chin¹, Muhammad Faiz Bin Che Jusoh¹, Cheong Suh Yu¹, Nasrun Binti Hasenan³, Mohd Fairul bin Limun¹, Norasiah Abu Bakar¹

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ID 021 AMYLOID AMBUSH: HEART RESTRICTION AND COLONIC INVASION

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ID 024 GENOTYPE 3 HEPATITIS C CIRRHOTIC CURED WITH ULTRA-SHORT DURATION OF DIRECT-ACTING ANTIVIRAL (DAA) THERAPY: A CASE REPORT

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ID 025 BECHET DISEASE WITH GIT INVOLVEMENT - ESOPHAGEAL ULCER AND COLITIS - A CASE REPORT

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ID 026 A RANDOMISED CONTROLLED TRIAL OF RIFAXIMIN THERAPY VERSUS LOW FODMAP DIET IN IRRITABLE BOWEL SYNDROME: AN INTERIM ANALYSIS

Wah Loong Chan¹, Kee Huat Chuah¹, Ai Kah Ng², Qing Yuan Loo¹, Audrey Joe Chii Loh¹, Wen Xuan Hian¹, Xin Hui Khoo¹, Sarala Panirsheeluam³, Hazreen Abdul Majid², Sanjiv Mahadeva¹

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ID 027 EFFICACY OF USTEKINUMAB TREATMENT FOR CROHN'S DISEASE IN MALAYSIA: A REAL-WORLD EXPERIENCE

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ID 028 HCV ERADICATION INDUCED BY DIRECT-ACTING ANTIVIRAL AGENTS REDUCES THE RISK OF HEPATOCELLULAR CARCINOMA - A RETROSPECTIVE STUDY

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ID 029 NAVIGATING THE DIAGNOSTIC CHALLENGE IN A CASE OF NONVARICEAL UPPER GASTROINTESTINAL BLEED IN CHRONIC LIVER CIRRHOSIS: SEVERE PORTAL HYPERTENSIVE GASTROPATHY OR HAEMORRHAGIC GASTRITIS?

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ID 030 STEWARDSHIP OF PROTON PUMP INHIBITORS IN MEDICAL WARDS AT HOSPITAL RAJA PEREMPUAN ZAINAB II: CONSIDERATIONS FOR INPATIENT THERAPEUTIC AND PROPHYLACTIC USE

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ID 033 A SURVEY OF PARTICIPANT SATISFACTION EXPERIENCES USING PATIENTS VERSUS PATIENT SIMULATION-BASED METHODOLOGIES FOR TEACHING ENDOSCOPIC VARICEAL MANAGEMENT

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ID 034 LIVERSTAT FOR THE DIAGNOSIS OF COMPENSATED ADVANCED CHRONIC LIVER DISEASE IN PATIENTS WITH TYPE 2 DIABETES

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PRIMARY NON RESPONDER TO ANTI-TNF (INFLIXIMAB) IN CROHN'S DISEASE EMPIRICALLY TREATED AS GUT TUBERCULOSIS

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A 22 years old gentleman, presented in October 2017 with diarrhea associated with mucus and abdominal pain for 3 months. Proceeded with colonoscopy which revealed extensive deep ulceration with ileocaecal involvement and narrowing at the recto sigmoid junction able to pass with gastroscopy. He was treated as ileocolonic Crohn's with possible stricture and started on tapering dose of prednisolone and azathioprine. Subsequently patient lost follow up due to covid-19 pandemic and presented again October 2021 with persistent diarrhea for 1 year and weight loss 10kg. He had close contact with grandmother and sister with tuberculosis. Colonoscopy noted stricture at sigmoid unable to pass through and HPE revealed active colitis with chronicity. MRE showed narrowing at sigmoid with thickened wall and subcentimetric intraabdominal lymph nodes and possible right gluteal early fistula formation. He was started on prednisolone tapering, azathioprine and empirically treated for TB due to strong contact history of TB patients and HPE revealed multinucleated giant cells and granulomas.

Colonoscopy 2 months post anti tuberculosis in January 2022 shows improvement and HPE shows focal active colitis. Symptoms improved with bowel opening 2 times/day and weight increasing. Patient again had worsening symptoms with diarrhea 5 times a day and weight reducing trend while 6 months post anti tuberculosis. He was treated as structuring Crohn's disease and prednisolone tapered and stopped. He was started on infliximab 5mg/kg in June 2022. He was continued and completed 9 months course of anti TB. Repeated colonoscopy 6months post infliximab shows stricture at descending colon and sigmoid with multiple deep ulcers in keeping with active Crohn's disease. Infliximab drug level was 6.5mg/ml and no antibody detected. MRE done in July 2023 shows progression of disease with no evidence of fistula or collection. Infliximab dose increased to 10mg/kg (450mg) however not responding and was switched to ustekinumab.

FRAGMENTED PERISTALSIS IS A MOTILITY PHENOMENON ASSOCIATED WITH AGE RATHER THAN OBESITY OR ACID EXPOSURE

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OBJECTIVE: Fragmented peristalsis (FP) is an oesophageal motility disorder, often identified during high resolution manometry for various gastroesophageal symptoms but can be asymptomatic too. Its clinical significance is poorly understood, hence our study aimed to investigate the factors associated with fragmented swallows percentage (FS%) in FP.

METHODOLOGY: Symptomatic patients who underwent oesophageal high-resolution manometry at Hospital USM from 2020-2023 were retrospectively reviewed. FP is defined based on the Chicago Classification v3.0 (Kahrilas *et al.*, 2015) and FS% (% of FP) in each patient was determined. Associations between FS% with demographics and acid exposure time (AET) from 24-hour pH study were determined using the Spearman's ρ correlation test and univariate logistic regression.

RESULTS: Of 200 patients screened, 30 (17F, mean age: 47.8 ± 16.1 years, median body-mass-index (BMI): 24.44 ± 6.82 kg/m²) were included in final analysis. FS% was found to be significantly associated with age (p=0.372; P=0.043), but not BMI and sex (both P>0.05). Of 22 patients (11F, mean age: 50.1 ± 14.9 years, median body-mass-index: 23.85 ± 7.04 kg/m²) who had completed a pH study, 18 were diagnosed with gastroesophageal reflux disease and two each with reflux hypersensitivity and functional heartburn, respectively. No associations were demonstrated between FS% with AET (P>0.05).

DISCUSSION AND CONCLUSION: FS% is significantly associated with age rather than sex, obesity or AET. FP is possibly a normal physiological phenomenon contributed by the ageing process. A larger cohort is needed in future studies to prove the hypothesis.

ACUTE SYMPTOMATIC HYPONATREMIA FOLLOWING SODIUM PICOSULFATE AS BOWEL PREPARATION FOR COLONOSCOPY

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INTRODUCTION: Sodium Picosulphate, a commonly prescribed medication for the treatment of constipation and as a bowel-cleansing agent prior to colonoscopy, is generally considered a safe and effective laxative. Although many patients who take this medication experience no significant adverse effects, a review of the existing research suggests that there is a small risk of rare but potentially serious complications, such as seizures, that can occasionally occur in association with its use.

CASE DESCRIPTION: A 63-year-old gentleman, with underlying diabetes mellitus and hypertension was referred for colonoscopy for a positive Fecal Occult Blood Test (FOBT). He developed an episode of seizure seven hours after taking sodium picosulphate. He had normal baseline blood test prior but developed severe electrolytes imbalances; Sodium 115mmol/L, Potassium 1.9mmol/L, Chloride 86mmol/L, Magnesium 0.66mmol/L and Calcium 1.87mmol/L. He developed an episode of generalized tonic clonic seizure and subsequently intubated in ICU for cerebral and airway protection. Hypertonic saline S3% was given to correct the severe acute hyponatremia in addition to intravenous IV potassium, magnesium and calcium supplementation. His condition soon stabilized after correction of electrolytes imbalance. He was discharged well and rescheduled for colonoscopy.

CONCLUSION: The key underlying mechanism of this rare complication is the significant electrolyte disturbances, particularly severe hyponatremia, hypokalemia, hypomagnesemia and hypocalcemia, that can develop because of the osmotic effects of sodium picosulphate, leading to a disruption in normal neurological functioning. One should be aware of this potential complication when prescribing the medication.

AUTOIMMUNE PANCREATITIS: AN IMPORTANT MIMICKER OF PANCREATIC CANCER

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INTRODUCTION: Autoimmune pancreatitis (AIP) is a rare chronic fibro-inflammatory disease of the pancreas that belongs to the spectrum of immunoglobulin G-subclass 4 related-disease (IgG4-RD).

CASE DESCRIPTION: A 67-year-old gentleman presented with abdominal pain and jaundice for a period of one month. He was otherwise well prior with no known medical illness. The physical examination was unremarkable. His liver function test revealed Total Bilirubin 62umol/L, Alanine Transaminases ALT 157U/L, Aspartate transaminases AST 132U/L, Gamma Glutamyl Transferase GGT 257U/L, Alkaline Phosphatase ALP 154U/L and Albumin 47g/L. A Computed Tomography (CT) scan was performed, and it showed an enlarged pancreatic head, measuring 4.5 x 5.4cm causing upstream biliary obstruction. The pancreatic duct is minimally dilated at pancreatic neck 3.7mm and pancreatic body 4.0mm. There is no enlarged peripancreatic node. He was clinically diagnosed with pancreatic cancer and subsequently underwent a Whipple procedure. Intraoperatively, there was an enlarged head of pancreas measuring 6 x 6 cm and was firm and hard in consistency. The histopathological report showed dense lymphocytic infiltration and storiform fibrosis with few areas of phlebitis and elevated IgG4 plasma cells >50/hpf seen in keeping with diagnosis of Type I AIP. Post-operative was uneventful, patient started on pancreatic enzyme supplements and he is on regular monitoring for diabetes and pancreatic exocrine insufficiency.

CONCLUSION: AIP can mimic pancreatic cancer, presenting with segmental or focal enlargement. The characteristic radiological findings of AIP is diffuse pancreatic parenchymal enlargement with delayed enhancement (specificity >95%). Elevated serum IgG4 may support the diagnosis of AIP but it can be elevated in 10% of pancreatic cancer patients. The role of Endoscopic Ultrasound (EUS) is important to ensure correct diagnosis (sensitivity 92%, specificity 100%). This not only prevents the patient from undergoing massive surgery, which can potentially cause short- and long-term complications, but also potential medicolegal complications that may arise.

EUS-GUIDED ASPIRATION OF PREVERTEBRAL ABSCESS

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Endoscopic ultrasound guided fine needle aspiration(EUS-FNA) provides an excellent investigational modality for the evaluation of various mediastinal pathologies. It also accurately visualizes collections, allowing therapeutic aspiration.

A 65-year-old man with uncontrolled diabetes mellitus presented with neck and right shoulder pain for five days. Two weeks prior, his right hand was pricked by a Mimosa plant (*Mimosa pudica*) during gardening and this was complicated with furuncles. He was normotensive, not tachycardic and afebrile and he was started on the insulin sliding scale. Neurological examination of his upper limbs was normal. Blood cultures grew methicillin (oxacillin) sensitive staphylococcus aureus (MSSA) sensitive to oxacillin. There were not vegetations on echocardiography.

Magnetic resonance imaging of spine revealed a prevertebral and paravertebral loculated rim enhancing collections with the largest locule at C7 to T4 measuring 3.1 cm x 4.1 cm x 7.3 cm (APX WX CC), displacing the trachea anteriorly and esophagus anterolaterally. Open drainage surgery discussed by the spine and cardiothoracic team and was deemed unsafe and high risk.

Endoscopic ultrasound (EUS) revealed a heterogenous lesion was seen at posterior wall of esophagus measuring 70mm x 30mm. This was aspirated and the contents showed thick brownish purulent material. Cultures was also confirmed to be MSSA.

The patient was treated with intravenous Cloxacillin 2g QID(four times a day) for a duration of six weeks. He was subsequently discharge well.

A follow up computed tomography scan at two weeks and six weeks showed reduction in the size of the collection and complete resolution respectively.

CONCLUSION: EUS-FNA can be an alternative modality in such challenging pathologies. Surgery can be avoided especially in high risk situations where there is no safe window for open surgical drainage.

BLACK ESOPHAGUS - UNCOMMONLY COMMON PRESENTATION OF UGIB

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Black esophagus refers to the endoscopic manifestation of acute oesophageal necrosis(AEN). It is a rare but potentially under-recognized cause of life -threatening upper gastrointestinal bleeding, resulting in high mortality in ill patients.

A 58-year-old man, an ex-alcoholic presented with two days history of hematemesis and one month of abdominal discomfort. On examination he appeared jaundice and clinically dehydrated. On examination, he was in hypovolaemic shock. Blood pressure 56/32, Heart rate: 115, Spo2: 82%. Blood investigations showed pancytopenia (WBC 0.63, HB 6.0, Plt: 44), coagulopathy (INR 5.06), acute renal failure(creatinine 292), transaminitis (AST 150, ALT: 47), severe metabolic and lactic acidosis(pH 7.15, HCO3: 13.6, lactate 14.9).

The patient was resuscitated in the emergency department with prompt initiation of broad spectrum antibiotics (Meropenem), hydration, inotropes (noradrenaline, adrenaline and vasopressin) and proton pump inhibitors (Esomeprazole).

Once stable, an emergent esophagogastroduodenoscopy revealed black discolouration of the entire oesophagus. At the gastroesophageal junction, the mucosa appeared normal.

Unfortunately, the patient succumbed from irreversible multiorgan failure.

CONCLUSION: AEN carries a high mortality rate of 32% despite intensive efforts. More research needs to be done aiming to better understand the pathophysiology, thereby identifying strategies for prevention or cure.

A CASE OF METASTATIC HEPATOCELLULAR CARCINOMA

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Hepatocellular carcinoma (HCC) is the most common cause of primary liver cancer. It rarely metastasizes to the head, neck and maxillofacial region. We present a 53-year-old gentleman who presented with a two weeks progressive hoarseness of voice, dysphagia and globus sensation. Physical examination revealed multiple right cranial nerve palsies (CN V3, IX, X, XI). Abdominal examination was unremarkable. A contrast-enhanced computed tomography (CECT) of the head and neck revealed bony erosions with enhancing soft tissue component involving the right mandibular ramus and right basi-occiput, associated with extension into the right jugular foramen; right hemitongue hemiatrophy, and right vocal cord paralysis. A CECT-thorax, abdomen and pelvis confirmed a multicentric hepatocellular carcinoma at segment III, V, VI, and VIII, size ranging from 0.7cm to 2.5cm, with metastases to the right adrenal gland and lungs. The patient underwent a biopsy of the soft tissue at right mandible, which revealed metastatic hepatocellular carcinoma. The alpha fetoprotein is 5.10 IU/ml. The patient was planned for combination of radiotherapy of the mandible, transarterial chemoembolization (TACE) of the liver lesion and systemic therapy after discussion in the multidisciplinary board.

HCC is the most common primary malignant hepatic neoplasm, but less than 1% of the cases metastasize to the head, neck and maxillofacial region. Such cases may result in grave prognosis due to its atypicality, leading to delay in diagnosis.

EUS-GUIDED COIL WITH CYANOACRYLATE INJECTION THERAPY IN THE MANAGEMENT OF GASTRIC VARICES - A SINGLE CENTER CASE SERIES IN MALAYSIA

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BACKGROUND AND OBJECTIVES: Gastric varices (GV) has high rates of rebleeding and mortality. Current endoscopic therapies are premised on endoscopic cyanoacrylate injection which is a non targetted therapy and carries a higher risk of rebleeding. Endoscopic Ultrasound (EUS) guided therapy in recent times has gain much attraction in the management of GV. We present a case series of EUS guided coiling in combination with cyanoacrylate (CYA) injection for the treatment of GV.

METHODOLOGY: Six patients with GV underwent EUS guided coiling and CYA injection from July 2021 to December 2023. Embolization coils (size 12mm to 16mm) were inserted under EUS guidance followed by CYA injection. Obliteration of GV was confirmed by doppler imaging and endoscopic visualization. All patients were given prophylactic antibiotics. The baseline characteristics, technical success, clinical success, rebleeding rates and adverse events were recorded.

RESULTS: Among the 6 patients included, the most common etiology of GV was cirrhosis (83%), with MAFLD being the most common cause (80%). The main indication for therapy was primary prophylaxis (50%). 67% had GOV-2 with mean GV size of 18±6.0mm and the mean number coils used were 2±1.1. All patients achieved technical and clinical success. There were no intraprocedural adverse events, however 3 patients developed low grade fever post procedure requiring antibiotics and hospital admission. Only one patient had delayed rebleeding after 6 weeks.

CONCLUSION: Combination of EUS coil and CYA therapy is an effective management for gastric varices with acceptable safety profile. Transient fever seen in half of the patients, was an interesting observation which needs further exploration.

RETENTION OF CAPSULE ENDOSCOPY - A RARE COMPLICATION

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Capsule endoscopy has significantly improved the diagnosis of small bowel pathologies. Despite its widespread use and favourable safety profile, capsule retention remains a rare but significant complication.

A 62-year-old lady with end-stage renal failure on regular hemodialysis presented with acute gastrointestinal bleeding, evidenced by melaena. She came in hypotensive and tachycadia. Upon presentation, her haemoglobin level was 5g/dL. An upper endoscopy performed after resuscitation was normal. A colonoscopy revealed no abnormalities up to the terminal ileum. A computer tomography angiography (CTA) of the mesenteric vessels failed to identify bleeding source. A capsule endoscopy was then performed revealing blood in the proximal jejunum area. The capsule was also noted to be stucked within a large diverticulum in the proximal small bowel from 18 minutes 22 seconds and remained at the same location throughout the examination. As the patient was haemodynamically unstable with persistent dropping haemoglobin, an exploratory laparotomy was performed. Intraoperatively, an on-table enteroscopy noted the capsule was within a large jejunal diverticula, with surrounding inflamed mucosa from recent bleeding. The segment of the diseased small bowel together with the retained capsule was resected and primary anastomosis was performed. The patient did not have any further re-bleeding but unfortunately succumbed to severe sepsis and multiorgan failure.

Capsule retention is a rare complication, occurring in approximately 1.4% to 2.6% of cases. Clinicians and patients must be aware of such rare complication and timely management is important especially in the patient's best interest. Capsule retrieval is not necessary as an emergency procedure, but in this case, surgery was performed due to haemodynamic instability.

INFLAMMATORY BOWEL DISEASE MIMICS

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INTRODUCTION: Diagnosing inflammatory bowel disease (IBD) may be challenging as it requires a combination of clinical, biochemical and pathological features. An accurate diagnosis is important as it determines the management.

CASE REPORT: A 46 years old fisherman presented with intermittent diarrhea with pain upon defecation for one year. He described his stool as small in volume and Bristol 6. He denies fever or constitutional symptoms. Upon presentation, vitals were stable. Abdominal examination was normal. Digital rectal examination showed presence of grade 1 internal hemorrhoid. Blood investigations were unremarkable (HB 15, TWC 10, platelet 235 Albumin 41 CRP 15), stool culture was negative for ova and cysts.. Initial colonoscopy showed multiple ulcers in the lower rectum, demonstrating active colitis with prominent eosinophilic activities. He was discharged with anti helminth however symptoms persisted. A repeated colonoscopy with segmental biopsies showed intestinal spirochetosis with background of focal active colitis. Stool protozoa PCR revealed presence of Entamoeba Histolytica. Ultrasonography of hepatobiliary system did not show presence of liver cysts or abscess. He was started on tab metronidazole 500mg TDS for 10 days followed by tab paramomycin 500mg TDS for 7 days and made a complete recovery. A repeat colonoscopy is scheduled.

CONCLUSION: This case highlights the similarities of presentation between infective diarrhea and IBD. A thorough investigation is required to prevent inappropriate immunosuppressive therapy, though a concomitant pathologies can also exist.

DOUBLE TROUBLE: WHEN CROHN'S DISEASE MEETS LYMPHOMA - STRIKING A BALANCE IN TREATMENT CHALLENGES

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INTRODUCTION: Perianal fistulizing Crohn's disease is often indicative of severe disease, prompting early initiation of biologic therapy, preferably anti-TNF agents. Co-administration of thiopurines with anti-TNF agents has shown to reduce immunogenicity and enhance anti-TNF drug levels, leading to improved clinical outcomes. Here, we present a case of perianal fistulizing Crohn's disease complicated by Burkitt lymphoma one year after the initial diagnosis.

CASE DESCRIPTION: A 47-year-old man was diagnosed with ileocolonic and fistulizing Crohn's disease, A3 (L3+4) B3p in March 2022, presenting with recurrent oral ulcers, chronic diarrhoea, and constitutional symptoms. Diagnosis was confirmed through esophagogastroduodenoscopy (OGDS), revealing duodenitis with aphthous ulcers, and histopathological examination (HPE) at D1 indicating chronic active inflammation. Colonoscopy showed a few aphthous ulcers at the sigmoid colon, mild proctitis, and pseudopolyps at the anorectal region, with HPE (rectum/left colon) showing active inflammation. Additionally, MRI pelvis detected an inter-sphincteric perianal fistula. Treatment commenced with a six-month regimen of prednisolone and azathioprine, achieving remission. An OGDS & colonoscopy were conducted 15 months later. The colonoscopy results showed several apthous ulcers at the terminal ileum (TI), while the rest of the segments appeared normal. HPE revealed active ileitis with chronicity changes in the TI, while the right and left sides of colon exhibited mild chronicity changes. The OGDS identified multiple nodules, later identified as aggressive B-cell lymphoma, specifically Burkitt lymphoma. Consequently, the patient underwent R-DA-EPOCH-21 chemotherapy for six cycles. EBV IgG serology was not conducted due to financial constraints.

DISCUSSION: The presence of penetrating and stricturing features in Crohn's disease predicts poorer outcomes, and the treatment with biologics shows promise in achieving remission. However the role of azathioprine in Crohn's disease is also significant when combined with biologic therapy and cannot be overlooked. In EBV-negative patients undergoing thiopurine therapy, there is an increased risk of lymphoma, necessitating careful consideration. A recent multicentre cohort study assessed the safety of anti-TNF agents versus non-TNF biologics among patients with active or recent cancer who have inflammatory bowel disease (IBD). The study found no significant difference in progression-free survival risk between patients exposed to TNF-alpha antagonists versus non-TNF biologics (hazard ratio [HR]: 0.76; 95% confidence interval [CI]: 0.25-2.30; p=0.62). In patients with IBD and active cancer, both anti-TNF and non-TNF biologics demonstrate similar safety profiles. However, the choice of biologic should be based on IBD severity, with consultation with an oncologist recommended. Based on the evidence, there may be a preference for anti-TNF agents in this scenario.

CONCLUSION: The case underscores the importance of meticulous management of perianal fistulizing Crohn's disease, suggesting the early use of biologic agents in combination with thiopurines, while taking into account potential risks such as immunosuppression and malignancy.

"FROM SEED TO STOMACH" TESTICULAR MASS DISGUISED AS UPPER GASTROINTESTINAL BLEEDING

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INTRODUCTION: Non-seminomatous germ cell tumors are aggressive malignancies that frequently metastasize to the lungs, bones, brain, liver, and lymph nodes.³ The occurrence of mucosal metastasis to the stomach is uncommon, with reported incidences ranging between 0.2% and 0.7%.³ Here, we present a case of a primary germ cell tumor of the testis, which metastasized to both the stomach and lungs.

CASE DESCRIPTION: A 26-year-old gentleman, with a family history of ovarian carcinoma in his mother, presented with a 3-month history of chronic cough, along with haemoptysis and constitutional symptoms. A chest X-ray revealed multiple cannonball lesions prompting further investigation with a CT scan of the thorax. This scan revealed multiple lung nodules in both lungs, suspicious of metastasis, with the largest measuring 7.0 x 7.8 x 7.6 cm in the right upper lobe. Subsequent CT imaging of the abdomen/pelvis showed enlarging right paraesophageal nodes measuring 5.0 x 5.0 cm.

He presented with symptomatic anaemia, with stable vital signs, and a per rectal examination revealed old melena. Laboratory findings indicated a haemoglobin level of 6.2 g/dL, MCV of 78 fL, MCH of 23 pg. An OGDS uncovered a large solitary mass, measuring more than 5x5x5 cm, located at the corpus with an ulcerated surface. A targeted biopsy confirmed a malignant germ cell tumor, likely embryonal carcinoma, with elevated levels of Total Human Chorionic Gonadotropin (476 IU/L) and AFP (247 ng/mL), along with elevated LDH (2494 U/L).

Upon further evaluation, we discovered the presence of swelling in the right scrotum measuring 5x5x6 cm, hard in consistency, and painless. Overall picture consistent with a mixed germ cell tumor non-seminoma of the testis with metastasis to the stomach and lungs. The case was referred to an oncologist and urologist, with the planned treatment including etoposide plus platinum-based chemotherapy for four cycles, followed by right orchiectomy post-chemotherapy.

DISCUSSION: Gastric adenocarcinoma stands as the most prevalent gastric malignancy among young adults. However, less common types, including GIST, germ cell tumors, and rhabdomyosarcoma, have been reported in case studies. Notably, gastrointestinal metastases from testicular germ cell tumors, though uncommon, occur in less than 5% of cases, with the stomach being the most common site.³ Typically, these metastases manifest as solitary lesions rather

than multiple.3 Symptoms often encompass abdominal pain and melena, with fewer cases presenting hematemesis and hematochezia. Less frequent symptoms may include non-bloody vomiting, abdominal mass, and distension.³

Bleeding from gastrointestinal tumors poses a challenge to traditional endoscopic treatment methods.¹ Nonetheless, recent trials indicate promising outcomes with TC-325 (Hemospray), a hemostatic powder, achieving immediate hemostasis in patients with active GI tumor bleeding.¹ In these trials, patients with suspected malignant upper or lower GI bleeding were randomly assigned TC-325 or standard endoscopic treatment (SET). TC-325 notably reduced 30-day rebleeding rates and achieved immediate hemostasis more effectively than SET.¹ Endoscopic ultrasound (EUS)-guided therapy emerges as an effective therapeutic approach for refractory GI tumor bleeding.² It facilitates the accurate identification of the bleeding source and precise delivery of sclerosing agents such as lauromacrogol.⁴ This method presents a safe and less invasive alternative to surgery, boasting a therapeutic success rate of 78%, with no adverse events reported.²

Current guidelines advocate for cisplatin-based combination chemotherapy with bleomycin, etoposide, and cisplatin as the first-line therapy for advanced non-seminoma germ cell tumors.³

CONCLUSION: Emphasizing the rarity of metastatic stomach cancer with a primary testicular tumor in this age group is paramount. Hence, conducting a thorough examination of the testes in patients within this demographic is crucial. The TC-325 hemostatic powder demonstrates higher immediate hemostasis rates and lower 30-day rebleeding rates compared to contemporary SET methods.¹

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UNVEILING THE MASK: EOSINOPHILIC COLITIS AND ITS DIAGNOSTIC CHALLENGES IN MASQUERADING AS IBD

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INTRODUCTION: Eosinophilic colitis (EC) is a rare primary condition marked by eosinophilic infiltration of the colon without secondary causes. Diagnosis is confirmed through histopathological analysis of colonic biopsies, revealing a predominantly eosinophilic inflammatory infiltrate. Our case highlights EC's diagnostic obscurity, often masquerading as inflammatory bowel disease (IBD).

CASE DESCRIPTION: We present a 41-year-old woman with chronic diarrhea for one year, no history of asthma, significant constitutional symptoms, or rectal bleeding. Her fecal calprotectin level was 995 mg/kg (normal <50 mg/kg). Eosinophil count was 2.5% (normal), and immunoglobulin E levels were 4.47 ku/L (normal up to 160 kU/L). Further tests, including peripheral blood film, ANA, C3/C4, p-ANCA/c-ANCA, stool microbiology, and HIV screening, were unremarkable. She had no history of medications associated with colonic eosinophilia, such as NSAIDs or estrogen-progestin agents.

A 2022 colonoscopy showed erythema and friability in the descending and sigmoid colon. Microscopic examination revealed focal mucosal surface ulceration and erosion in the rectum, with increased eosinophils in the lamina propria (ranging from >20 to >100 eosinophils per high power field). Focal crypt infiltration was observed in the sigmoid colon without chronicity, cryptitis, or crypt abscess, suggesting eosinophilic colitis. An upper gastrointestinal endoscopy (OGD) was unremarkable.

The patient began a tapering regimen of prednisolone and then started on azathioprine 50 mg (1 mg/kg). Her condition improved remarkably. A follow-up colonoscopy after one year showed multiple small, superficial, discrete aphthous ulcers with surrounding edema. Histopathology revealed predominantly mucosal eosinophilia with active colitis (cryptitis) and increased chronic inflammatory cells mainly composed of eosinophils and lymphoplasmacytic cells. There was no basal plasmacytosis, Paneth cell metaplasia, or mucosal architectural distortion.

DISCUSSION: Normal eosinophil counts (per mm²) are 55.7 ± 23.4 in the right colon, 41.0 ± 18.6 in the transverse colon, and 28.6 ± 17.2 in the left colon. There are no gold-standard diagnostic criteria for eosinophilic colitis, but suggested

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guidelines include more than 100 eosinophils in the right colon, more than 84 in the transverse or descending colon, and more than 64 in the rectosigmoid colon.

Distinguishing eosinophilic colitis from IBD is challenging as both conditions exhibit peripheral and tissue eosinophilia. IBD typically shows granulomas, crypt architectural distortion, pseudopyloric metaplasia, and fibrosis, which are usually absent in eosinophilic colitis. IBD's inflammatory infiltrate is usually mixed, not exclusively eosinophils.

Recent studies suggest eosinophils play roles in ulcerative colitis development and treatment outcomes prediction. Elevated eosinophils and eosinophil-derived proteins (EDPs) often correlate with heightened disease activity, increased clinical relapse likelihood, and greater disease severity in ulcerative colitis. Patients with elevated eosinophil levels often respond poorly to treatment. These findings highlight the potential impact of therapies targeting eosinophils, emphasizing the need for further research.

Elimination diets and corticosteroids remain the mainstay treatments for eosinophilic colitis. However, due to long-term corticosteroid use's adverse effects and potential refractory states, alternatives like budesonide have been explored. Various second-line agents have been used successfully for chronic treatment.

CONCLUSION: The rarity of eosinophilic colitis and its overlapping features with IBD underscore the need for precise diagnostic guidelines.

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AMYLOID AMBUSH: HEART RESTRICTION AND COLONIC INVASION

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INTRODUCTION: Gastrointestinal Amyloidosis can be the primary manifestation of amyloidosis or part of systemic involvement. Approximately 3-28% of patients with amyloidosis experience gastrointestinal (GI) symptoms alongside cardiac, renal, or neurological issues.² We present a case of systemic immunoglobulin light chain (AL) amyloidosis involving both the colon and heart.

CASE DESCRIPTION: A 58-year-old woman with multiple comorbidities initially presented with symptoms of heart failure. Her ECG revealed a low voltage complex, and echocardiography showed left ventricular hypertrophy with speckles in the intraventricular septum, along with elevated diastolic filling pressures suggestive of diastolic dysfunction restrictive cardiomyopathy. Hematological evaluation indicated elevated levels of monoclonal paraprotein and λ -free light chains, prompting investigation for amyloidosis. Persistent symptoms of diarrhea, dysphagia, and weight loss led to colonoscopy and esophagogastroduodenoscopy, revealing colonic edema with friable mucosa. Biopsies confirmed colonic amyloidosis, showing positive Congo Red staining and apple-green birefringence under polarized light. Unfortunately, the patient passed away shortly after diagnosis due to multiorgan failure secondary to primary amyloidosis.

DISCUSSION: GI manifestations of AL amyloidosis include fatigue, anorexia, abdominal pain, weight loss, GI bleeding, malabsorption, protein-losing enteropathy, and motility disorders.⁴ Chronic diarrhea, affecting 11-46% of patients, typically results from gastrointestinal motility disturbances due to autonomic neuropathy and inflammation.² Bacterial overgrowth from abnormal small intestinal motility also contributes to diarrhea.² Management involves symptomatic relief, with options such as octreotide and steroids for refractory cases with protein-losing enteropathy.²

Endoscopic findings in intestinal amyloidosis are nonspecific, including a granular appearance, erosions, mucosal friability, or protrusions.² Localized GI amyloidosis may require observation or surgical excision, while systemic cases address underlying disease pathology.⁴ Several reports have documented the effective treatment of amyloid colitis using colchicine, which is believed to prevent the extracellular assembly of amyloid subunits into mature fibrils. This inhibition is crucial for mitosis and motility.³

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The prognosis of GI amyloidosis is influenced by the extent of GI tract involvement, the amount of amyloid deposition, and the type of amyloid present.⁴ Patients with AL amyloidosis and GI involvement have a worse prognosis compared to those without GI involvement.⁴

CONCLUSION: Colonic amyloidosis often presents with nonspecific symptoms. Physicians should consider amyloidosis in patients with chronic diarrhea and multisystem involvement.

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DANIS STENT FOR THE MANAGEMENT OF ESOPHAGEAL VARICEAL BLEEDING: A SYSTEMATIC REVIEW AND POOLED ANALYSIS

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The purpose of this study was to identify and assess the available clinical evidence regarding the use of the Danis Stent (DS) for managing refractory esophageal variceal bleeding.

A search of the peer-reviewed literature was conducted in PubMed, Science Direct, Cochrane, and Web of Science databases. The review encompasses prospective, retrospective, comparative, and single-arm studies that detail the clinical application of DS for managing refractory esophageal variceal bleeding. The Methodological Index for Non-Randomized Studies was employed to evaluate the quality of the studies and the risk of bias. Clinical efficacy and safety data were extracted from the included studies and used for the pooled analysis.

Ten studies were identified that met the inclusion criteria. In total, clinical data related to 180 DS implantations were obtained. The technical success rate of stent deployment was 97.6%. Clinical success (bleeding control during 7 days of stent implantation) was achieved in 91% of cases. The most frequent complication associated with DS was migration, occurring in 20% of cases; however, only two cases were reported to result in recurrent bleeding. Additional complications included mild ulceration (6%), and bleeding following stent removal (2%). Complications such as aspiration, pain, infection, perforation, dysphagia, and hiccups had an incidence of less than 1%.

The DS outperforms the Sengstaken-Blakemore tube in clinical success (91% vs. 64.5%, p<.001). DS also reduces the risk of severe aspiration (0.5% vs 11.2%, p<.001) and enhances patient comfort by eliminating the requirement for balloon maintenance. Additionally, implantation of the DS does not require endotracheal intubation, allows oral food intake, and the DS can remain in place for up to seven days to stabilize patients before definitive treatment, unlike the short-term Sengstaken-Blakemore tube.

The pooled analysis indicates that using the DS provides a more favorable benefit-risk ratio compared to the Sengstaken-Blakemore tube.

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EPIDEMIOLOGY, PREDICTORS AND TREATMENT OUTCOME OF ACHALASIA IN A MULTI-ETHNIC ASIAN POPULATION WITH NON-OBSTRUCTIVE DYSPHAGIA

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OBJECTIVES: Epidemiological data and predictors of achalasia among Asians presenting with non-obstructive dysphagia are scarce, hence our aims in the current study.

METHODOLOGY: This was a retrospective cohort study of consecutive multi-ethnic Asian patients with non-obstructive dysphagia who underwent oesophageal high resolution manometry in Universiti Malaya Medical Centre (Petaling Jaya) and Hospital Universiti Sains Malaysia (Kota Bharu). Oesophageal motility disorders including achalasia were diagnosed using the Chicago Classification v3.0. Prevalence, incidence, predictor factors (multivariate analysis) and treatment outcome were determined with p<0.05 as significant.

RESULTS: A total of 231 patients were included (mean age 53 years, females 53.2%). Prevalence of achalasia was 25% and estimated incidence was 0.46 per 100,000 people. Prevalence of subtypes of achalasia was 8.7% Type 1, 13.4% Type 2, and 2.2% Type 3 respectively. Younger age (OR 0.94, 95% CI: 0.90-0.99, p=0.009) and BMI <18.5 kg/m² (OR 18.42, 95% CI: 1.39-244.48, p=0.027) were predictors of achalasia. 63.6% underwent peroral endoscopic myomectomy (POEM) and 15.2% had pneumatic dilation. A positive symptom outcome was observed in patients who underwent POEM, ranging from 76.2% at 3 months to 75% at 2 years.

CONCLUSION: Achalasia is prevalent in Asians with non-obstructive dysphagia. A younger age and being underweight are predictive factors for achalasia. POEM is the most common intervention with a positive symptom outcome.

GENOTYPE 3 HEPATITIS C CIRRHOTIC CURED WITH ULTRA-SHORT DURATION OF DIRECT-ACTING ANTIVIRAL (DAA) THERAPY: A CASE REPORT

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INTRODUCTION: Shorter duration of DAA therapy can expand access to treatment and reduce drug costs. However, studies of shorter antiviral treatment durations have yet to produce high enough cure rates. We report a case of Genotype 3 Hepatitis C cirrhotic achieved cure with 4 weeks DAA therapy.

CASE REPORT: A 48-year-old gentleman, poor glycemic controlled Diabetes Mellitus was seen for Child's Pugh Score B (7) liver cirrhosis secondary to treatment naive Chronic Hepatitis C. Initial assessment showed HCV RNA of 57,219 iu/ml, Genotype 3, AST 152 U/L, ALT 108 U/L, total bilirubin 33.3 umol/L, and BE3A score of 3 (84.4% probability of achieving CPS A in 36 weeks). He was initiated with T. Sofosbuvir and T. Ravidasvir and planned for 24 weeks regime. However, he was not keen to continue with the DAA therapy after 4 weeks of treatment as he claimed it cause constipation and leg swelling. Both HCV RNA level done at 10 weeks and 25 weeks after stopping the DAA were not detected. Patient's liver status has improved to CPS A (6) with resolution of hepatitis C related transaminitis.

CONCLUSION: Shorter duration of DAA therapy is possible in genotype 3 Hepatitis C cirrhotic. Further studies should focus on identifying patients who would benefit from shorter treatment duration.

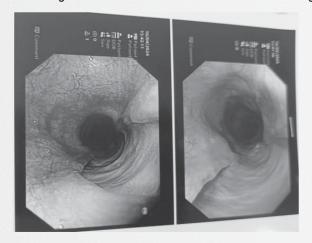
BECHET DISEASE WITH GIT INVOLVEMENT - ESOPHAGEAL ULCER AND COLITIS - A CASE REPORT

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INTRODUCTION: Behçet's disease (BD) is a rare systemic vasculitis of varying calibers of blood vessels throughout the body that would affect any part of organs. The aim of this case report is GIT presentation may mimic Inflammatory bowel disease and treatment may vary. This is an attempt at describing a manifestation of BD with colitis and esophageal ulcer and high index of suspicious is needed for diffential diagnosis and other organ involvement.

CASE REPORT: This 48 years old lady with underling diabetes mellitus and hypertension for years, presented with recurrent painful mouth ulcer for 6 months associated with blood and mucus in stool, multiple skin lesions and red eyes. She is also complaining loss of appetite and weight (79-72kg in 3 months).

Her initial workout show her Hb is 9.8g/dl and albumin of 28.Her CRP is raised. Subsequently she underwent skin biopsy and OGDS shows 3cm length solitary esophageal ulcer 20cm from incisor and biopsied. Her colonoscopy also shows deep irregular ulcer, loss of vascular pattern ,erythema, mucosa bridging and apthous ulcer at rectum, descending and ascending colon as well as caecum and terminal ileum. Segmental biopsy shows.



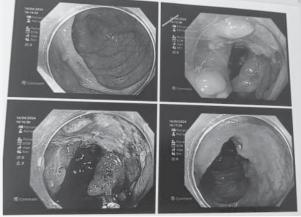


FIGURE 1: Showing Esophageal ulcer Endoscopiclly

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HCV ERADICATION INDUCED BY DIRECT-ACTING ANTIVIRAL AGENTS REDUCES THE RISK OF HEPATOCELLULAR CARCINOMA - A RETROSPECTIVE STUDY

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BACKGROUND: Approximately 2.5% of the Malaysian population is currently living with hepatitis C virus (HCV) infection. Thus, HCV infection is a leading cause of hepatocellular carcinoma (HCC) worldwide. The risk factor for HCC among patients with HCV is cirrhosis. Viral eradication is thought to reduce cancer risk by preventing cirrhosis and causing regression of fibrosis. Eliminating HCV also reverses the HCC pathogenesis, such as chronic inflammation and direct carcinogenic effects of the virus. However, the question of whether DAAs prevent HCC has generated substantial controversy. This study was conducted to determine the associated factors among cirrhotic patients develop hepatocellular carcinoma after SVR12 within 2 years.

OBJECTIVE: The aim of the study was to determine the change in liver stiffness measurements after successful treatment with DAAs in chronic Hepatitis C with liver cirrhosis between 2018 till December 2023 by using APRI and FIB4 and determine the factors associated with changes in the status of liver fibrosis and development of HCC by measurement of AFP level and ultrasound within this period study.

METHOD: Study design was retrospective cohort, and the study involved a total of 126 patients from Hospital Sultanah Nur Zahirah, Kuala Terengganu. It involved adults above 18 years old and had achieved SVR-12 with DAAs with or without Ribavirin regardless of treatment naïve or experience, presence of cirrhosis or virus genotype. They were evaluated using APRI scores >1.5, FIB-4 scores >2.67 and US Hepatobiliary at the baseline and SVR-12 and 6 monthly ultrasound screening.

RESULTS: The changes in mean (SD) APRI score were 2.84 (3.04) at baseline to 1.78 (1.07) after SVR12, while the mean (SD) FIB-4 score was from 4.70 (4.03) at baseline to 2.89 (2.97) after SVR-12. The multiple regression analysis revealed that clinical data including platelet, AST and ALT were significant predictors of advanced fibrosis (P<0.05). Only 1.58 percent (n:2) of patients developed HCC after achieving SVR within 2 years, thus the median survival time cannot be determined.

CONCLUSION: Our study has demonstrated a significant reduction in liver stiffness (based on APRI and FIB-4) after achieving SVR-12 among cirrhotic patients. Clinical data including platelet count and ALT and AST levels are significant independent predictors of liver fibrosis. After achieving SVRs, the risk of developing hepatocellular carcinoma is extremely low. However, the residual risk for HCC after SVR means that surveillance is still required for patients with advanced fibrosis and cirrhosis.

NAVIGATING THE DIAGNOSTIC CHALLENGE IN A CASE OF NON-VARICEAL UPPER GASTROINTESTINAL BLEED IN CHRONIC LIVER CIRRHOSIS: SEVERE PORTAL HYPERTENSIVE GASTROPATHY OR HAEMORRHAGIC GASTRITIS?

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INTRODUCTION: Severe portal hypertensive gastropathy (PHG) can rarely cause diffuse mucosal bleeding, mimicking haemorrhagic gastritis during endoscopy. This resemblance challenges diagnosis, but histopathological examination can distinguish between these conditions. We present a case of overt non-variceal upper gastrointestinal bleeding (NVUGIB) with endoscopic features of diffuse mucosal bleeding, diagnosed as severe PHG.

CASE DESCRIPTION: A 37-year-old female with chronic liver cirrhosis secondary to biliary atresia post Kasai portoenterostomy presented with acute UGIB, necessitating endoscopic intervention. A prior esophagogastroduodenoscopy revealed oesophageal varices (OV), for which she was on carvedilol. During the emergency endoscopy, fresh clots in the stomach's fundus and corpus were difficult to clear. Repositioning the patient to the right lateral position exposed multiple actively oozing points scattered diffusely. Typical PHG changes like a mosaic-like gastric mucosa pattern, were absent. The same OGDS showed OV without stigmata of recent haemorrhage. Topical haemostatic powder and terlipressin effectively stopped the bleeding. No clinical rebleeding occurred in the following days. Her carvedilol dose was optimized and liver transplant evaluation was underway. A stomach biopsy confirmed the diagnosis, showing oedematous lamina propria with superficial congested capillaries.

DISCUSSION: Overt bleeding from severe PHG is rare, occurring in merely 2.5% of cases in one review. Haemorrhagic gastritis features multifocal superficial mucosal bleeding without peptic ulcer disease, matching our endoscopic findings. Although typical PHG findings were absent, the presence of OV indicated portal hypertension. The PHG diagnosis was confirmed through stomach biopsy HPE. Haemostatic agent and argon plasma coagulation have been shown effective in endoscopic haemostasis for bleeding PHG. Non-selective beta blockers effectively decrease portal hypertension. For acutely bleeding PHG, agents like somatostatin and octreotide reduce gastric perfusion temporarily.

CONCLUSION: This case highlights the diagnostic challenge of diffuse gastric mucosal bleeding in acute NVUGIB in chronic liver disease, emphasizing the importance of comprehensive evaluation and tailored management strategies.

STEWARDSHIP OF PROTON PUMP INHIBITORS IN MEDICAL WARDS AT HOSPITAL RAJA PEREMPUAN ZAINAB II: CONSIDERATIONS FOR INPATIENT THERAPEUTIC AND PROPHYLACTIC USE

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INTRODUCTION: The widespread prescription of Proton Pump Inhibitors (PPIs) in hospitalized patients has raised concerns due to instances of overuse without clear therapeutic indications and inappropriate stress ulcer prophylaxis. Long-term PPI use is linked to kidney diseases, *Clostridium difficile* infection, fractures and hypomagnesemia. This study aimed to evaluate the prescribing practices.

METHOD: Data was prospectively collected from 76 patients across three general medical wards in HRPZ II: 28 in the male ward, 27 in the female ward and 21 in the high dependency ward. Therapeutic indications were assessed based on the US Food and Drug Administration (FDA) approved indications, including gastroesophageal reflux disease, erosive esophagitis, Barrett's oesophagus, peptic ulcer disease, *Helicobacter pylori* eradication and Zollinger-Ellison Syndrome. For prophylactic indications related to stress ulcer prophylaxis, we followed the guidelines set by ASHP (American Society of Health-System Pharmacists).

RESULTS: A demographic analysis revealed a male predominance (55.3%, n=42). The majority of patients were aged 45-65 years (54%, n=41). Notably, 32.9% (n=25) of the PPI prescriptions lacked clear indications. Among those with appropriate indications (67.1%, n=51), the majority were for prophylaxis (n=46), with only five prescriptions intended for therapeutic use. Of these five, three met FDA criteria. Among the 46 subjects receiving PPIs for prophylaxis, 24 were designated for stress ulcer prophylaxis, while 22 were linked to combined antiplatelet therapy or antiplatelet with anticoagulant therapy.

DISCUSSION: Concerns over PPI safety have prompted scrutiny due to their association with various side effects. Inadequate documentation was significant. Unnecessary PPI prescriptions increase the likelihood of adverse effects, drug interactions and waste healthcare resources. Future research should explore interventions to improve prescription practices, including developing local guidelines, conducting continuous medical education and restricting PPI prescriptions to specialists.

CONCLUSION: The study highlights the need for improved prescribing practices and guidelines to ensure patient safety and healthcare resource utilization.

A SURVEY OF PARTICIPANT SATISFACTION EXPERIENCES USING PATIENTS VERSUS PATIENT SIMULATION-BASED METHODOLOGIES FOR TEACHING ENDOSCOPIC VARICEAL MANAGEMENT

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INTRODUCTION: The effective teaching of endoscopic variceal management is critical for gastroenterologists. This study surveys participant satisfaction comparing traditional patient-based teaching methods with simulation-based methodologies.

METHODS: Participants of the Esophageal & Gastric Varices Workshop 2024 completed a post-training survey. The survey included questions on demographics, training quality, and the effectiveness of patient-based vs. simulation-based methodologies. Descriptive statistics summarized the data, and mean scores were calculated for each question. Comparative analysis was conducted by examining the average ratings for patient-based versus simulation-based methodologies to identify preferences and perceived effectiveness.

RESULTS: The survey included responses from 10 participants. The majority rated the overall quality of the training content highly, with an average score of 4.8 out of 5.0. Coverage of expected topics (4.7), trainer effectiveness (4.8), and overall delivery (4.9) were also rated positively. When comparing methodologies, participants rated their preference for practicing on demo models/mannequins at 3.7, confidence built by practicing on demo models/mannequins at 4.2, and learning effectiveness from demo models/mannequins at 4.1. These results indicate a favorable view towards simulation-based training, highlighting its potential in building confidence and enhancing learning outcomes without patient risk.

CONCLUSION: Both patient-based and simulation-based methodologies are effective for teaching endoscopic variceal management, with slight preferences noted towards simulation-based training. The incorporation of simulation training offers a risk-free environment to practice, which can complement traditional methods. Future workshops should consider a blended approach to maximize learning outcomes.

LIVERSTAT FOR THE DIAGNOSIS OF COMPENSATED ADVANCED CHRONIC LIVER DISEASE IN PATIENTS WITH TYPE 2 DIABETES

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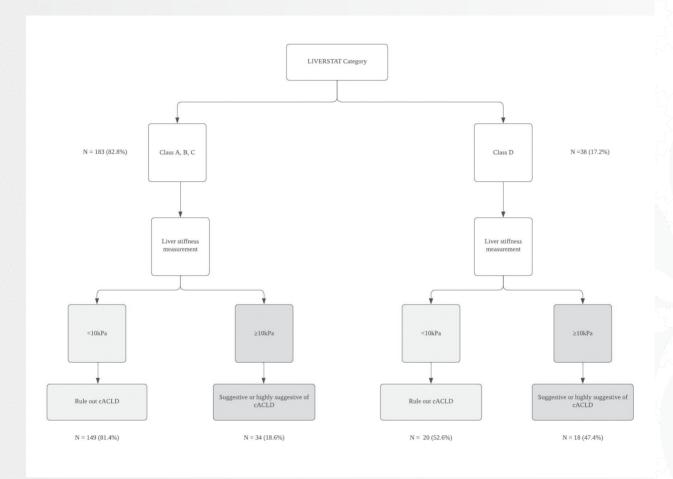
OBJECTIVES: LIVERSTAT is an artificial intelligence-based test that provides risk stratification for metabolic dysfunction associated fatty liver disease. We aimed to study the performance of LIVERSTAT compared with the Fibrosis-4 Index (FIB-4) as a stand-alone test and as a first-line test in diagnosing compensated advanced chronic liver disease (cACLD) in patients with type 2 diabetes (T2D).

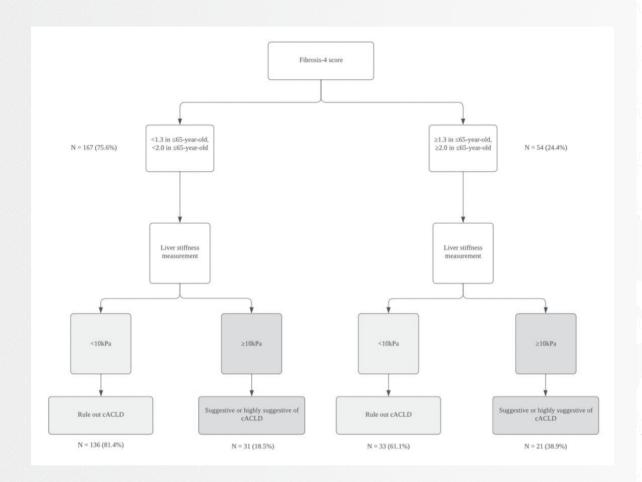
METHODOLOGY: This is a cross-sectional study of patients with T2D who underwent transient elastography. Patients with liver stiffness measurement (LSM) > 10kPa were considered to have cACLD. LIVERSTAT results were generated by a proprietary algorithm using readily available demographic, anthropometric and laboratory data: aspartate aminotransferase (AST), alanine aminotransferase (ALT), gamma glutamyl transferase (GGT), age, body mass index, fasting glucose, bilirubin, cholesterol and triglyceride levels, compared to AST, ALT, age and platelet count for calculating FIB-4.

RESULTS: The data for 221 patients (mean age 61 years, 41% male, cACLD 26%) were analysed. The area under the receiving operating characteristic curve, sensitivity, specificity, positive predictive value, and negative predictive value for LIVERSTAT were 0.66, 35%, 88%, 47%, and 81%, respectively. The corresponding values for FIB-4 were 0.61, 40%, 81%, 39%, and 81%, respectively. When using LIVERSTAT as a first-line test, the proportion of patients requiring transient elastography was 17% (38/221), while the proportion of false negatives was 19% (34/183). The corresponding values for FIB-4 were 24% (54/221), and 19% (31/167), respectively (see Figure 1).

DISCUSSION: This study provides primary data on the performance of LIVERSTAT for diagnosing cACLD in patients with T2D.

CONCLUSIONS: LIVERSTAT has similar accuracy as FIB-4 when used as a stand-alone test or as a first-line test in combination with transient elastography in diagnosing cACLD.





A FATAL CASE OF MELLIOIDOSIS IN AN ULCERATIVE COLITIS PATIENT ON HIGH DOSE CORTICOSTEROIDS

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OBJECTIVE: Corticosteroids are important for treating ulcerative colitis (UC) flares, but predispose to infections. Here we report on a UC patient who developed severe mellioidosis after corticosteroid treatment for recurrent flares.

CASE REPORT: A 42 year old man with 4 months of bloody diarrhea was diagnosed with UC. His colonoscopy showing pancolitis and extensive ulcerations, with suggestive histopatho-logy. He was given oral Prednisolone 40 mg/day with subsequent tapering. A month later, he developed a flare with bloody diarrhea, anemia, and extensive colon ulcerations. He was treated with IV Hydrocortisone 400 mg/day for 7 days, then Prednisolone 40 mg/day for 1 week before tapering, and Azathioprine 50 mg/day. The following month, he had another flare with fever and worsening anemia, which was treated similarly. This time, he had persistent fever and high C-reactive protein (CRP). Blood cultures grew *Burkholderia pseudomallei*. This was treated with IV Ceftazidime 8 g/day for 4 weeks, while maintaining Prednisolone 10 mg/day. However, his condition worsened with hypoxemia, and CT showed bilateral lung consolidations, cavitations, and left hydropneumothorax. This progressed to bronchopleural fistula requiring suction drainage. Later, he developed acute abdomen due to colon perforation, and subtotal colectomy was performed. He then died of septic shock.

DISCUSSION: According to guidelines, high dose corticosteroids are recommended during severe flares of UC. Bacterial infections including pneumonia are known complications in inflammatory bowel disease (IBD) patients receiving corticosteroids. Immunosuppressed patients in Southeast Asia are at risk of mellioidosis. Clinicians should be vigilant for signs of infection in such IBD patients, including persistent fever, raised neutrophils and persistently raised CRP. A septic workup and broad spectrum antibiotics should be initiated in patients with signs of sepsis.

CONCLUSION: This case highlights that severe bacterial infections including mellioidosis may occur in IBD patients on corticosteroids; timely diagnosis and treatment is important to prevent adverse outcomes.

CASE OF METASTATIC SMALL CELL NEUROENDOCRINE CARCINOMA OF LIVER IN ULCERATIVE COLITIS PATIENT

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OBJECTIVE: This case highlights the rare diagnosis of Neuroendocrine tumors (NETs) in ulcerative colitis.

CASE REPORT: A 27-year-old Malay gentleman with a history of ulcerative colitis diagnosed in 2013 has undergone multiple surgeries, including subtotal colectomy and panproctocolectomy. He developed chronic active pouchitis and ileitis post-operatively. Despite treatment with azathioprine and infliximab, colonoscopies revealed ongoing inflammation and ulcers. Recently, he was admitted with right hypochondriac pain, and a CECT scan showed multiple liver lesions with retroperitoneal lesions and possible distal right portal vein thrombosis. A liver biopsy identified a malignant tumor with neuroendocrine differentiation, likely metastatic small cell neuroendocrine carcinoma with a proliferative index >95%. Hepatobiliary evaluation suggested an oncology referral as he was a poor candidate for surgery. Further CECT Neck, TAP did not identify the primary site of the neuroendocrine tumor.

RESULT: Radiotracer imaging was planned, and the patient was referred to an oncologist for consideration of starting somatostatin analogue treatment. Unfortunately, he succumbed before the radiotracer imaging and treatment could be initiated.

DISCUSSION: Neuroendocrine tumors (NETs) are rare primary liver tumors and often arise from neuroendocrine cells in the gastrointestinal and respiratory tracts. Liver involvement typically results from metastasis. Diagnosing metastatic small cell neuroendocrine carcinoma of the liver is challenging, as primary sites may be undetectable even with advanced imaging. Literature reviews indicate that metastatic liver NETs are rare, highly aggressive, and have a poor prognosis.

CONCLUSION: Patients with IBD are at increased risk of malignancies due to long-standing inflammation. In literature reviews, thiopurines and anti-TNF agents are associated with hematologic malignancies, skin cancer, and other neoplasms, but not neuroendocrine tumors. Neuroendocrine neoplasms are rare and rarely reported in IBD, necessitating further investigation into this association.

PULMONARY GLUE EMBOLISM: CONSERVATIVE MANAGEMENT OR ANTICOAGULATION?

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INTRODUCTION: Histoacryl glue is used increasingly for the treatment of gastric varices. It is an effective treatment, yet it is associated with life-threatening complication of pulmonary glue embolism. Management of pulmonary glue embolism is mainly supportive, and there is usually no need for anticoagulative measures. We report the case of a pulmonary glue embolism that responded well to anticoagulation therapy.

CASE DESCRIPTION: A 56-year-old Malay gentleman with underlying Hepatitis C cirrhosis, presented with hematemesis and melena for 3 days. Gastroscopy revealed gastroesophageal varices type II with signs of recent hemorrhage and Grade II esophageal varices with red wale sign. The gastric varices were injected with 3 sessions of 0.5ml histoacryl glue. Post procedure, he developed respiratory distress, requiring increasing oxygen support. CT pulmonary angiogram revealed bilateral acute pulmonary embolism. He was arranged for a repeat gastroscopy for variceal eradication and was subsequently started on anticoagulation therapy. He was able to wean off oxygen therapy in the following days.

DISCUSSION: The risk of embolization is associated with variceal diameter, rate of injection, presence of perisplenic portosystemic shunts, total volume, and ratio of the constituent components of the glue. It has been recommended that no more than 1ml of histoacryl glue be injected in each session. In this case, the tiny amount of glue used for each session of injection does not adequately explain the development of extensive pulmonary embolism. Most likely the glue has acted as a nidus for clot propagation. Anticoagulation therapy has been started in this case to prevent further clot formation. Most of the literature states that the management of pulmonary glue embolism is mainly supportive. However, the index case responded well to anticoagulation therapy.

CONCLUSION: Pulmonary glue embolism is an unusual but life-threatening complication of histoacryl glue injection for gastric varices. High index of suspicion is required.

GERMLINE GENETIC TESTING IN A HIGH-RISK COLON CANCER PATIENT IDENTIFIES RELATIVES AT RISK OF LYNCH SYNDROME - A CASE STUDY

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BACKGROUND: Up to 5% of colorectal cancer are attributed to Lynch syndrome. Individuals with with Lynch syndrome are at a higher risk of developing a range of cancers, with the risk for colorectal, endometrial, and ovarian cancer being the most significant. Colorectal cancer patients with high-risk features such as young age of diagnosis, family history of Lynch syndrome-associated cancers, and/or tumour microsatellite instability (MSI) should be referred for genetic counselling.

CASE: A 37 years-old male was diagnosed with early-stage colon adenocarcinoma. A right hemicolectomy was performed. Subsequent MSI polymerase chain reaction (PCR) analysis of the tumour tissue revealed mutations in 5 out of 7 biomarkers tested, confirming an MSI-high result. The patient reportedly has a sister with ovarian cancer, as well as multiple paternal relatives with colorectal cancer. He was later referred for genetic counselling by his oncologist due to a suspicion of Lynch syndrome.

RESULTS: Genetic testing revealed a germline *MLH1* pathogenic variant, confirming the diagnosis of Lynch syndrome. This result was communicated to the patient's oncologist and general surgeon to facilitate appropriate clinical management. Familial variant testing (also known as cascade testing) was also offered to his family members, particularly siblings and paternal relatives. This provides an opportunity to systematically identify other carriers within the family, for whom risk management strategies such as regular colonoscopy and risk-reducing hysterectomy and salpingo-oophorectomy can be put in place. Conversely, it can also alleviate the risk of relatives who do not carry the familial variant.

CONCLUSION: Colorectal cancer patients who fulfill genetic testing criteria should be referred for genetic counselling. Apart from providing clinical utility to the index patient, ascertaining a pathogenic or likely pathogenic germline variant also helps identify at-risk family members through cascade testing, which subsequently creates an avenue for appropriate risk management.

SACCHAROMYCES BOULARDII CNCM I-745 AND RIFAXIMIN AS SECONDARY PROPHYLAXIS IN THE PREVENTION OF RECURRENT CLOSTRIDIUM DIFFICILE INFECTIONS

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INTRODUCTION: Clostridium Difficile infection (CDI) associated with significant morbidity and mortality. Recurrence may occur in 15-30% of patients within the first 30 days post-treatment. The cause of CDI recurrences assumed to be a disturbed gut microbiota.

CASE PRESENTATION: A 74-year-old gentleman presented with fever, diarrhoea, with white blood cell (WBC) of 16. Stool *Clostiridium Difficile* Antigen, toxins A and B, were positive. He was on long-term urinary catheterization due to benign prostatic hyperplasia. He suffered from recurrent urinary tract infections and completed multiple courses of antibiotics prior to recurrent CDI, to which he was admitted eight times from October 2022 to April 2023. Received an adequate dose of oral vancomycin and metronidazole at every admission.

METHOD: Fidaxomycin and faecal microbiota transplantation are not available, hence started on PO Vancomycin 500mg QID for 10 days, followed by PO Rifaximin 550mg TDS for 20 days, and PO Bioflor 250mg BD for 28 days. Subsequently, no recurrence for over a year.

DISCUSSION: In the paucity of options for patients with recurrent CDI, a different regime of treatment outside the norm should be considered. For this patient, sequential therapy is used as mentioned in the method above. Rifaximin has been found to be significantly effective in the resolution of the symptoms of CDI patients unresponsive to metronidazole previously. The yeast *Saccharomyces boulardii* CNCM I-745 is a unique, non-bacterial microorganism classified as a probiotic agent. A meta-analysis and systematic review showed that *S.boulardii* use does not prevent CDI in all patients needing antibiotics. It has been proven to have a role in secondary prophylaxis of CDI.

CONCLUSION: Alternative regimes of CDI treatment with sequential high-dose vancomycin, rifaximin, and combination *S.boulardii* as secondary prophylaxis have successfully treated our patient, who had recurrent CDI previously. This regime can be considered in situations with limited options and resources.

INTESTINAL OBSTRUCTION DUE TO INTERNAL HERNIA: A DIAGNOSTIC CHALLENGE

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INTRODUCTION: Although internal hernias are uncommon, this should be considered a differential diagnosis in cases of intestinal obstruction, especially in patients with no history of previous surgery or trauma. Internal hernias are a potentially life-threatening condition due to a high possibility of strangulation and ischaemia of the affected bowel loops. It is a surgical emergency that must be quickly recognised and promptly addressed.

CASE VIGNETTE: An 18-year-old man was involved in a motor vehicle accident where he briefly lost consciousness. Upon regaining consciousness, he complained of abdominal pains and was subsequently admitted to our centre. On arrival, he was fully conscious with normal vital signs; further examination revealed a soft abdomen tender to palpation at the periumbilical area extending to the epigastrium. There were also abrasions present at the left iliac fossa extending to the suprapubic area. Contrast-enhanced CT abdomen revealed descending colon bowel thickening suggestive of bowel contusion. He was treated conservatively and discharged after several days of ward observation. However, he presented again two weeks post-discharge, complaining of being unable to tolerate orally due to persistent vomiting as well as abdominal distension. Upper gastrointestinal endoscopy showed a stomach filled with bilious fluid and traces of faeculent matter. An urgent contrast-enhanced CT abdomen revealed small bowel obstruction with evidence of bowel injury and mesenteric haematoma. The patient underwent exploratory laparotomy, whereby an internal herniation of the jejunal segment into the adjacent omentum was seen. As the affected bowel was unhealthy, segmental resection with primary anastomosis was performed. The patient was discharged after several days post-op and is currently well under surgical clinic follow-up.

DISCUSSION AND CONCLUSION: This case report highlights the challenge of diagnosing an internal hernia. Despite repeated radiological assessments, the diagnosis was only made after surgical exploration which necessitated further intervention.

LENVATINIB-RELATED GASTROINTESTINAL BLEEDING IN A PATIENT WITH HEPATOCELLULAR CARCINOMA

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INTRODUCTION: Lenvatinib inhibits multiple tyrosine kinase receptors that regulate diverse signalling pathways, thereby influencing cancer progression. In unresectable hepatocellular carcinoma (HCC) cases, systemic treatment with lenvatinib assists in prolonging survival. Nevertheless, this medication is also associated with several adverse effects linked to its mode of action. Gastrointestinal bleeding, for example, is a recognised issue that may arise as a result of lenvatinib use. Cessation of lenvatinib therapy is imperative in such situations.

CASE VIGNETTE: A 64-year-old woman with a history of hypertension, Type 2 diabetes mellitus and dyslipidaemia was admitted due to progressive worsening of abdominal distension and constitutional symptoms for three months. Alpha-fetoprotein was 233,492 IU on admission; however, Hepatitis B and C screening were negative. Subsequent CT multiphase liver imaging showed multiple enhancing liver lesions. A diagnosis of HCC, most likely on a background of metabolic-associated fatty liver disease, was made. As she was not suitable for surgical or radiological intervention, she was commenced on oral lenvatinib therapy. One month later, however, she presented with haematemesis and melaena. Upper gastrointestinal endoscopy revealed Grade 2 oesophageal varices. Additionally, there was severe portal hypertensive gastropathy with blood oozing from multiple locations throughout the gastric fundus and body. Haemostatic powder spray was applied; proton pump inhibitor and octreotide infusions were continued. Lenvatinib therapy was stopped. Her condition continued to deteriorate in the ward slowly; after approximately a month of active medical therapy, she was transitioned to palliative care.

DISCUSSION AND CONCLUSION: Lenvatinib, a multityrosine kinase inhibitor used to treat HCC, blocks downstream signalling pathways, suppressing angiogenesis and reducing vascular permeability. These changes in vascular dynamics and function could lead to an increased risk of gastrointestinal bleeding. Thus, lenvatinib use should be stopped in such situations.

PROLONGED CHOLESTASIS INDUCED BY ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY (ERCP)

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INTRODUCTION: Endoscopic Retrograde Cholangiopancreatography (ERCP) was well recognised procedure to remove common bile duct (CBD) stone. It was rare to have prolonged cholestasis post successful therapeutic ERCP. However, in rare instances, patient would complicate with contrast-induced liver injury as we reported below.

CASE REPORT: 58 years old gentleman initially presented with obstructive jaundice symptoms on May 2022 for 1 month. He seeks treatment in private hospital and proceeded with CT pancreatic protocol, however it reported as no obstruction. But blood investigation was suggestive of obstructive jaundice, so he was referred to Hospital Melaka for ERCP. We proceeded with endoscopic ultrasound (EUS) and noted choledocholithiasis with cholelithiasis. The next day we proceeded with ERCP and complete clearance of CBD stone was done. In view of hyperbilirubinaemia persist, we worried of residual stone, so 2nd ERCP was done 2 days later. Cholangiogram showed minimal sludge with no obstruction and eventually stent was inserted. Alanine aminotransferase and aspartate aminotransferase were steadily declined but hyperbilirubinaemia persist. Patient was started on ursodeoxycholic acid (UDCA) and 2nd line investigations were sent. Despite the effort, the hyperbilirubinaemia persist for 1 week from 1st ERCP done. We proceeded with liver biopsy but it was complicated with hemothorax. Chest tube inserted and transfused 2-pint packed cell. Surprisingly, bilirubin declined after blood transfusion and 1 week of antibiotic (Ceftriazone). The 2nd line investigations were negative and liver biopsy was reported as drug-induced liver injury.

DISCUSSION: Prolonged cholestasis post ERCP was rare, there were few case reports on contrast induced liver injury. No established guideline on post ERCP cholestasis, but UDCA and glucocorticoid were recommended treatment. Non-invasive imaging was recommended to exclude residual CBD stone after 1st ERCP.

CONCLUSION: Patient discharged after 2 weeks of admission. His bilirubin normalised after 2 months from 1st ERCP without long term consequences.

VARIED TREATMENT RESPONSES IN PYOGENIC LIVER ABSCESSES AT A MALAYSIAN TEACHING HOSPITAL: A CASE SERIES

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INTRODUCTION: Pyogenic liver abscesses (PLA) are purulent collections in the liver parenchyma due to infections. Untreated PLA can lead to fatal complications. We have noticed an increasing number of difficult-to-treat PLA cases and are therefore reporting a case series from our centre.

CASE 1: 63-year-old male with multiple health issues presented with anorexia, lethargy, and fevers. He had a 6.9 cm liver abscess from ESBL-producing E. coli, treated with 12 weeks of IV Meropenem. Despite this, he had recurrence with an 11.8 cm abscess, requiring additional drainage and 14 weeks of IV antibiotics. Subsequently, no further recurrences.

CASE 2: 83-year-old male with diabetes, CKD and ischaemic heart disease presented with anorexia and fevers. Investigations revealed 5 cm liver abscess caused by Klebsiella pneumoniae. Treated with intravenous and then oral amoxicillin-clavulanate for total of 90 days and experienced no recurrence.

CASE 3: 73-year-old intellectually impaired female with diabetes, CKD presented with anorexia, fevers, and vomiting. A 10.9 cm liver abscess was drained, and she received 21 days of intravenous ceftriaxone and metronidazole followed by 70 days of oral amoxicillin-clavulanate. She had no recurrence.

CASE 4: 65-year-old female with diabetes, hypertension, and heart failure developed a 5.6 cm liver abscess after 10 days of anorexia and fevers. Treated with 9 days of IV ceftriaxone and metronidazole, followed by 35 days of oral cefuroxime and metronidazole, the non-liquified abscess was not drained. There was no recurrence.

DISCUSSION: There are no guidelines on optimal PLA treatment duration. In our series, the mean antibiotic duration was 79.25 days, posing an economic and healthcare burden. Poor resolution is linked to multi-resistant organisms and bilateral liver lobe involvement.

CONCLUSION: Our case series highlights varying treatment responses in liver abscess patients, with antibiotic duration dependent on sensitivity, drainage need, and ongoing abscess size.

BIOPSY PROVEN FATTY LIVER INFILTRATION IN PATIENTS WITH VIRALLY SUPPRESSED HIV INFECTION AND CHRONICALLY ELEVATED TRANSAMINASES: A CASE SERIES

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Persistent hepatitis are a common findings in an HIV infected patients. There are many causes, and in the immunosuppressed patients usually signifies opportunistic infections. However in the era of effective HAART, other causes has to be considered. We are describing a series of 5 cases of HIV infected individuals with no viral hepatitis co-infection who undergoes liver biopsy which reveals similar findings of fatty liver.

METHOD: All HIV positive patient on HAART with undetectable viral load for more than a year with persistently elevated ALT and AST at 2 times the upper limit of normal has been selected. All of them are on combination of Tenofovir-Emtricitabine and Dolutegravir. The patients undergoes liver biopsy after their autoimmune screening and liver autoantibody results are negative.

RESULTS: 5 patients met the criteria with ALT ranges from 106 to 395 IU/ml and AST ranges from 71 to 185 IU/ml with ALT>AST. Liver biopsy findings is as follows; First patient is 29 years old gentleman with marked steatosis (70%) and foci of spotty necrosis and mild periportal and sinusoidal fibrosis. Second patient is 40 years old gentleman with marked steatosis (60 to 70%) plus periportal and sinusoidal fibrosis. Third patient is 29 years old gentleman with moderate steatosis (40 to 50%). Fourth patient is 27 years old gentleman with mild steatosis (5 to 10%) plus periportal and sinusoidal fibrosis and fifth patient is 32 years old gentleman with severe steatosis (60 to 70%) and mild fibrosis. None of the liver biopsy shows features of autoimmune hepatitis or cholestasis or drug induced causes such as eosinophilic infiltration. Average BMI of the patient ranges from 24 to 30.

CONCLUSIONS: The case series highlights steatohepatitis as an important aetiology for persistent hepatitis in HIV infected patients, and illustrates the importance of addressing metabolic issues when managing these patients.

STREPTOCOCCUS GALLOLYTICUS AORTIC VALVE INFECTIVE ENDOCARDITIS IN COLON ADENOCARCINOMA: A CASE REPORT

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INTRODUCTION: Streptoccocus Gallolyticus sp, (formerly known as streptococcus bovis) is one of the main causative agents for infective endocarditis, and the occurrence of this infection is highly associated with colonic carcinoma. A literature survey from 1970 - 2010 revealed that 65% of patient diagnosed with invasive Streptoccus Gallolyticus had concomitant colonic neoplasia.

CASE REPORT: We reported a case of 66-year-old lady with underlying type 2 diabetes mellitus, hypertension and dyslipidaemia, who presented with 1 week history of bilateral lower limb swelling, orthopnoea and paroxysmal nocturnal dyspnoea. No history of chest pain, fever, cough, haematuria or frothy urine. Upon clinical examination, she showed sign of fluid overload with raised JVP, bilateral lower limb oedema and fine crepitation over bilateral lung field. There was early diastolic murmur heard over left sternal edge. Blood investigation show anaemia with thrombocytopenia, while her renal function, liver function and coagulation profile were within normal range. Her ECG shows sinus rhythm with poor R wave progression, and plain chest radiography showed cardiomegaly with blunted bilateral costophrenic angle. Her blood cultures grew streptococcus gallolyticus and her transthoracic echocardiogram shows 1.4cm x 1.2cm vegetation over aortic valve with severe aortic regurgitation. She was treated for infective endocarditis and started on intravenous antibiotic. She underwent colonoscopy which revealed circumferential and ulcerating rectosigmoid tumour 25cm from anal verge, in which histology confirmed adenocarcinoma. Staging CT scan showed no distant metastasize. Unfortunately, she develops acute decompensated heart failure and subsequently succumb to her illness.

CONCLUSION: The association of Streptococcus gallolyticus bacteremia with colonic carcinoma should not be underestimated and all patients presented with such diagnosis should be subjected to full bowel examination.

A FIRST MOLECULAR EPIDEMIOLOGICAL REPORT OF HEPATITIS D VIRUS IN THE EAST COAST OF PENINSULAR MALAYSIA

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BACKGROUND: The global burden of Hepatitis D virus (HDV) is still upward despite the introduction of Hepatitis B virus vaccines. This pioneering study aims to determine the molecular epidemiology of HDV patients with chronic Hepatitis B who are attending a tertiary institution hospital on the east coast of peninsular Malaysia, a region where such research has not been conducted before.

METHOD: A cross-sectional serological screening of sera retrieved from 226 chronic Hepatitis B patients was collected and screened for HDV antibodies (IgM and IgG) via ELISA. Samples with positive IgM antibodies were subjected to RNA extraction using the Machery-Nagal RNA/DNA extraction kit, and cDNA was synthesized from the RNA using a ThermoScientific cDNA synthesis kit. A nested PCR was conducted to detect the HDLAg gene and then sequenced.

RESULTS: Eighty-nine (89) out of 226 screened samples tested positive for HDV IgM (39.38%; Cl= 3.21%-78.4%). Approximately 80% of the HDV IgM-positive samples were successfully amplified and sequenced (71/89). Two HDV genotypes were in circulation within the cohort (HDV genotypes 1 and 2). HDV genotype 2 had the highest distribution (80.28%; 57/71), while genotype 1 had the lowest incidence (19.72%; 14/71). There was a significant difference in the types of occupation, educational qualifications and numbers of sexual partners at P<0.005. This study, the first of its kind in the east coast of peninsular Malaysia, provides crucial insights into the molecular epidemiology of Hepatitis D, particularly the presence of HDV genotypes, which will significantly contribute to our understanding of the disease.

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REAL WORLD DATA ON ULTRASOUND, PLATELETS COUNTS AND LIVER STIFFNESS MEASUREMENT IN PREDICTING LIVER FIBROSIS

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BACKGROUND: Cirrhosis and its complications develop in a group of patients with chronic liver disease. Early detection of liver fibrosis represents an important goal of clinical care. Fibrosis is a result of fibrogenesis which is the formation of connective tissue caused by liver tissue damage thus will affect the production of thrombopoetin. Currently, there are various methods to evaluate liver fibrosis. Liver biopsy is the gold standard but is an invasive and should not be operated repeatedly. In this study, we intend to establish multi parameter and verify its diagnostic efficacy in the diagnosis of liver fibrosis.

AIMS: A total of 102 patients in Hospital Kuala Lumpur with chronic liver disease were recruited to investigate the association between liver fibrosis and platelets count.

METHODS: This study is a retrospective cross-sectional study by taking the data from chronic liver disease were tested for complete blood count, ultrasound and Fibroscan at Hospital Kuala Lumpur. The determination of PLT indices was carried out using a automated hematology analyzer. The liver stiffness was measured in 102 patients by transient elastography (FibroScan). To avoid introducing bias through sample selection, our inclusion criteria was chronic liver disease including HBV, HCV and NAFLD, whereas the exclusion criteria were alcohol-related liver disease, significant pre-existing organ (heart, brain, lung or kidney) complications and presence of diseases that could affect PLTs such as atherosclerotic diseases, rheumatic diseases, hematologic disorders.

RESULTS: Overall, 102 subjects (HCV=18, HBV=48 and NAFLD=36), 70.5% male, with mean 52.8 (standard deviation 12) age of years were evaluated. Within the training cohort (n=102), platelets count, ultrasound and liver stiffness measurement by Fibroscan performed at identifying cirrhosis in comparison. The analysis showed that the platelets negatively correlated with the degree of liver fibrosis (p<0.05). The result showed 20.58% (n:21) patients with platelets more than 150k and ultrasound showed no irregularity 11.76% (n:12) categorized in F3-F4 group by Fibroscan. From the Spearman correlation analysis, the indexes such as platelets count, ultrasound and fibroscan were selected for multiple linear regression analysis, all showed P value < 0.005. The Area under curve (AUC) of platelets counts in the diagnosis of fibrosis is 0.614. The combination of platelets and ultrasound result showed 60% (n:18) specificity in the group F3-F4.

CONCLUSIONS: Our results demonstrate that platelets counts and ultrasound alone less sensitivity and specificity in determine liver fibrosis in chronic liver disease patients. Therefore, another valuable method by liver stiffness measurement is useful measures for evaluating liver fibrosis. Thus, platelets count and ultrasound combination with Fibroscan are expected improve the diagnostic efficiency of liver fibrosis stage to a certain extent and can help the clinical more accurate assessment of the degree of fibrosis especially in health service center.

DUODENAL BULB GASTRIC HETEROTOPIA: A RARE CAUSE OF UPPER GASTRO-INTESTINAL BLEED

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INTRODUCTION: Gastric Heterotopia (GH) is a rare finding in duodenum (0.5-14%). It does not have pathognomonic endoscopic/imaging feature, thus histopathology is the gold standard for diagnosis. GH may cause various complications like dyspepsia, obstructive symptoms or bleeding, thus it is crucial to diagnose it early before complications happen. A case of upper GI bleeding caused by duodenal bulb GH is illustrated here.

CASE DESCRIPTION: A 68 year-old man has limited cutaneous systemic sclerosis, with complications of gangrenous digits and peripheral vascular disease. He presented with lethargy and passing out blackish stool. His Haemoglobin was 7.4, with urea/creatinine being disproportionate. His iron was 6, Ferritin 77 and Transferrin Saturation 11%. OGDS was done, which showed a polypoidal mass at D1 with duodenitis. Biopsy was taken from the mass, with its histopathology reveals GH (presence of gastric glands with chief and parietal cells and surface lined by gastric foveolar epithelium). EUS was done later which characterised the lesion to be 1cm x 2cm in size, extending from antrum passing via the pyloric canal to D1. The lesion has thickened mucosa with it arising from the first layer, and no infiltration into the layers underneath.

Patient was maintained on lifelong PPI, and thus far he has no bleeding recurrence.

DISCUSSION / CONCLUSION: GH is rare, yet may pose significant complications, such as bleeding in this case. Therefore, recognising the possibility of such diagnosis is crucial so that biopsy(s) could be taken to confirm GH as diagnosis and initiate necessary treatment. Otherwise, unnecessary extensive investigations would have been done to further delineate the cause of bleeding (this case). However, the optimal medical treatment for GH is yet to be determined, as to date only surgical resection is the only proven therapy. Also, the surveillance of GH is still up for debate, in terms of the intervals and best modality to use.

GASTRO-COLONO-ENTERIC FISTULA FROM STENT MISDEPLOYMENT DURING ENDOSCOPIC ULTRASOUND-GUIDED GASTROJEJUNOSTOMY IN AN ALTERED ANATOMY PATIENT

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BACKGROUND / AIM: Endoscopic Ultrasound-guided gastrojejunostomy has been reported to have improved outcome for patients with gastric outlet obstruction. Commonly reported Stent Misdeployments (SM) are recently classified into 4 types by Ghandour et al on behalf of EUS-GE study group. In this case we report a stent misdeployment with delayed presentation of gastro-colono-enteric fistula using Hot Axios LAMS (lumen-apposing metal stents) for a patient with gastric outlet obstruction (GOO) in surgically altered anatomy.

RESULT: We report a case of SM on a 64-year-old lady with history of partial gastrectomy, combined chemo-radiotherapy for gastric cancer in 2008 and remains in remission. She developed recurrent surgical anastomotic stricture who does not respond to transluminal stenting, and not amendable to surgical intervention.

An EUS-GJ using water-irrigation technique was performed and the procedure went well. Buried LAMS was observed after 4 weeks with and temporarily removed and replaced with double pigtail catheters to maintain patency. The patient was restented 2 weeks later. 8 weeks post procedure she presented with persistent diarrhea and halithosis. Careful endoscopic evaluation shows a small gastro-colono-enteric fistula formation at the distal flange and stent was removed. CT Abdomen confirmed a gastro-colono-enteric fistula. She was put on bowel rest and the fistula was closed 2 weeks later with an over-the-scope-clip Padlock from gastric site. Since then, her symptoms of diarrhea have resolved.

CONCLUSION: Delayed recognition of gastro-colono-enteric fistula is a rare SM and has yet to be reported in the literature.

CHOLANGIOSCOPY LASER LITHOTRIPSY WITH THE NEW LEINZETT SINGLE-USE FLEXIBLE VIDEO CHOLEDOCHOSCOPE

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OBJECTIVE: History of peroral cholangioscopy dated back to more than 40 years ago. It's popularity, however, was hampered by technical limitation of cholangioscopes over the next 30 years. The introduction of SpyGlass technology over a decade ago marked a transformative milestone. Leinzett flexible video choledochoscope emerges as a new contender in the field of interventional endoscopy. We present 2 cases of choledochoscopy using the newly launched Leinzett single-use flexible video choledochoscope.

CASE 1: A 32-year-old gentleman with history of recurrent ascending cholangitis, electively admitted for ERCP cholangioscopy with laser lithotripsy to large CBD stone. Cholangioscopy was performed using Leinzett LAN-EP-3522 choledochoscope. Holmium laser was then used to fragment the 20mm choledocholithiasis. Procedure was successful and ended within 90 minutes, a plastic CBD stent was then inserted in view of incomplete stone fragments clearance.

CASE 2: A 75-year-old gentleman with history of ascending cholangitis secondary to a large choledocholithiasis, electively admitted for ERCP cholangioscopy with laser lithotripsy. Cholangioscopy was performed using Leinzett LAN-EP-2612 choledochoscope. Holmium laser was then used to fragment the CBD stone. Procedure ended successfully where multiple stone fragments were removed. Patient was stented in view of incomplete stone clearance.

DISCUSSION AND CONCLUSION: The Leinzett choledochoscope stands as a comparable alternative to the SpyGlass cholangioscopy system, offering a smaller caliber choledochoscope and maintaining clear image quality with its higher resolution of 160k pixels compared to SpyGlass's 90k pixels. Additionally, its design eliminates the necessity for a trolley or fixed table processor, making it highly portable and compatible with mobile devices such as pads or phones. This combination of features not only enhances convenience but also expands the scope of accessible and effective biliary tract examinations in clinical practice.

A CASE OF FULMINANT WILSON DISEASE: THERAPEUTIC PLASMA EXCHANGE AS A BRIDGE TO LIVER TRANSPLANTATION

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OBJECTIVE: Wilson disease (WD) is a rare autosomal recessive genetic disorder of copper metabolism, resulting in toxic hepatocellular copper accumulation and eventually deposition in other organs, notably the brain, kidneys, and cornea. We herein report a rare case of fulminant WD with successful use of therapeutic plasma exchange (TPE) as a bridge to liver transplantation.

CASE PRESENTATION: A 26 years old Sarawakian female, with body mass index (BMI) of 43 kg/m², presented to Hospital Miri in November 2023 with three days jaundice. Neurological examination was normal, no hepatic encephalopathy (HE) or ascites but had pitting oedema of bilateral lower limbs. Her initial blood results showed total bilirubin of 280 µmol/L, alkaline phosphatase (ALP) 44 U/L, alanine transaminase (ALT) 60 U/L, aspartate transaminase (AST) 212 U/L, lactate dehydrogenase (LDH) 800 U/L, hemoglobin 6.7 g/dL, reticulocyte count of 18%, direct and indirect Coomb's test negative, INR 2.8, urea 20 mmol/L, and creatinine 340 µmol/L. Her viral hepatitis and liver autoantibodies were negative, however, the serum ceruloplasmin was low at 0.11 g/L. Initial ultrasound of the abdomen revealed smooth liver margin with no evidence of biliary obstruction or focal liver lesion. Slit-lamp examination revealed bilateral eyes Kayser-Fleischer (KF) rings. With Leipzig score of four, diagnosis of fulminant WD was made, started D-penicillamine 250mg twice daily, but stopped after three days and switched to zinc acetate owing to worsening renal function that required haemodialysis. On day six of presentation her model for end-stage liver disease (MELD) score was 43 and the Dhawan score was 13, strongly predictive of mortality without liver transplant. Hence, she was transferred to Hospital Selayang, whereby TPE was performed for three days, and followed by deceased-donor liver transplant two weeks after that.

CONCLUSION: Prompt diagnosis of fulminant WD followed by optimizing medical management including TPE as a therapeutic measure to stabilize patient while awaiting liver transplantation is possible.

ENDOSCOPIC ULTRASOUND GUIDED LIVER BIOPSY USING THE 19-GAUGE THREE PRONG ASYMMETRIC TIP NEEDLE: A SINGLE CENTRE PRELIMINARY EXPERIENCE

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INTRODUCTION: EUS guided liver biopsy (EUS-LB) is an emerging technique with good efficacy and safety. A newer three-prong asymmetric tip (3-PAT) needle (Trident, Micro-Tech Endoscopy, Nanjing, China) has been developed and there is paucity of data on its performance and safety in EUS-LB. We aimed to review and report our early experience of performing EUS-LB using the 19G 3-PAT needle.

METHODS: All patients who had undergone EUS-LB using the 19G 3-PAT needle in Hospital Al-Sultan Abdulah, UiTM were retrospectively identified. The electronic medical records were reviewed and relevant information on demographics, clinical condition, technical details of the EUS-LB procedure, and pathological evaluation were obtained.

RESULTS: Between September 2021 and August 2022, there were 10 patients who underwent EUS-LB using the 19G 3-PAT needle. The gender distribution was 60% females and 40% males. The median age (IQR) was 51.5 (46.2, 64.7) years. The indications for EUS-LB were suspected autoimmune hepatitis (AIH) (60%) and unexplained abnormal liver biochemistry (40%). The left lobe of the liver was punctured in all patients. The technical success rate for obtaining core specimen was 100%. There were no major complications observed. The median total specimen length (IQR) was 57.5 (55, 60.5) mm and the median length (IQR) of the longest core was 8 (5.9, 10.3) mm. The median number (IQR) of portal tracts was 15 (10, 21). Moderate fragmentation was observed in 60% of the cases and 30% had severe fragmentation. The sample obtained from 80% of the cases were reported to be bloody. The diagnostic yield was 90% with one patient having a non-diagnostic sample. Steatohepatitis was the commonest diagnosis (30%) followed by drug-induced liver injury (20%).

CONCLUSION: EUS-LB using the 19G 3-PAT needle had a high technical success rate, high diagnostic yield and a good safety profile despite the frequently observed fragmentation and blood in the samples.

PASSENGER LYMPHOCYTE SYNDROME: A RARE CAUSE OF HYPERBILIRUBINEMIA IN POST LIVER TRANSPLANT PATIENT

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INTRODUCTION: Passenger lymphocyte syndrome (PLS) is an important cause of haemolysis after solid organ transplantation.

CASE DESCRIPTION: We describe a case of passenger lymphocyte syndrome after liver transplant. Mr CS, 39 years old, blood group A Indian gentleman was diagnosed to have decompensated liver cirrhosis secondary to alcohol related liver disease with MELD-Na score 22. He underwent cadaveric liver transplant with donor blood group O positive in April 2024. However, postoperative noted hyperbilirubinemia worsening from 41µmol/L (preoperative) to a peak of 621µmol/L at postoperative day (POD) 13. Liver biopsy done on POD8 showed acute cellular rejection with moderate activity (BANFF score of 6/9). Intravenous methylprednisolone 1g daily was given for 3 days before switching back to prednisolone 40mg daily. He was also maintained on Mycophenolate Mofetil 1g BD and Tacrolimus 3mg BD with Tacrolimus level ranging between 4.4 to 8ng/ml. Magnetic resonance cholangiopancreatography on POD13 showed no biliary tree changes. Due to worsening hyperbilirubinemia and reducing haemoglobin trend, he was then worked up for hemolysis. Peripheral blood film suggestive of hemolysis and Coombs test positive for anti-A. He was transfused 1 pint O positive packed cell each on POD15 and POD16. Liver function test showed improving trend as per table 1. He was discharged well on POD26.

DISCUSSION: PLS is caused by transfer of B-lymphocytes in donor graft into recipient circulation, which may produce antibodies against recipient's red cells resulting in hemolysis. The risk of developing PLS is greatest when the donor is group O and the recipient is group A. Typically, PLS is self-limiting. Treatment is generally supportive and includes transfusion of O RBCs when necessary. Rituximab and plasma exchange are reserved for refractory cases. In conclusion, physicians must have a high index of suspicion for PLS during early postperative period when post-transplant patients present with jaundice and anemia.

Table 1

	31/3/24 preop	1/4/24 postop	3/4/24	5/4/24	7/4/24	11/4/24	13/4/24	14/4/24	15/4/24	16/4/24	17/4/24	21/4/24	26/4/24 Discharge	21.6.24 Clinic
TWC (x10 ³ /μL)	10.3	18.6	14.4	13.7	14.8	17.9	21.3	20.6	23.4	23.9	34.0	27.5	12.3	4.8
HB (g/dL)	10.6	11.3	7.2	8.9	10.5	8.0	7.3	5.6	5.8 (1 pint PC)	5.9 (1 pint PC)	7.3	6.8	8.1	11.0
PLT (x10 ³ /μL)	97	44	45	44	41	154	259	302	320	287	307	167	181	244
INR	1.64	2.63	1.19	1.17	1.22	1.24	1.10	1.15	1.36	1.21	1.19	1.12	1.05	1.01
Total Bilirubin (µmol/L)	41	71	85	137	270	304	621	500	349	213	171	93	65	12
Direct Bilirubin (µmol/L)	-	46	59	92	164	224	473	453	191	114	-	-	23	-
ALP (U/L)	108	39	171	203	152	159	176	171	130	125	126	110	87	75
ALT (U/L)	23.5	750.6	1342	763.8	326	129	85.7	57.5	44.9	43	38.1	39	30.6	20.2
AST (U/L)	74	1915	763	157	41	25	60	29	21	16	22	23	37	26

Table 2

	/ ~	
Post liver	Anti-A IgG	Anti-A IgM
transplant		
Day 13	1:32	1:4
Day 18	1:16	1:2
Day 22	1:8	1:1

VALIDATION OF A STOOL DNA TEST UTILIZING METHYLATED SDC2 IN DETECTING COLORECTAL CANCER AMONG MALAYSIANS

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OBJECTIVES: Stool DNA (sDNA) testing has been a subject of interest as a non-invasive and simple screening tool for colorectal cancer (CRC). Methylated Syndecan-2 (SDC2) has been shown to be a common epigenetic change in early CRC or advanced colorectal adenomas among Asian populations. Commercially available stool DNA (sDNA) kits detecting methylated SDC2 have shown promising results in detecting early CRC and advanced colorectal adenomas in multicenter studies. This study aims to provide a validity of the performance and the predictive values of sDNA testing utilizing methylated SDC2 in detecting advanced colorectal adenomas and CRC in a Malaysian population.

METHODOLOGY: Participants from gastroenterology and surgery outpatient clinics in Hospital Kuala Lumpur were recruited during their local screening testing and clinical practice referrals for colonoscopy. Sixty consented participants were interviewed and had their symptoms recorded. They undertook a stool DNA testing using a qualitative molecular diagnostic test kit followed by a colonoscopy as standard reference. Resected polyps or biopsies from the colonoscopy were sent for histopathological studies.

RESULTS: Preliminary data showed the mean (SD) age of participants was 61.0 (10.3) years. 51.7% of the participants were females. The most common symptoms presented were altered bowel habits (35%), constipation (16.7%) and weight loss (13.3%). Three participants were diagnosed with colorectal cancer and seven with advanced adenoma size \geq 10mm. The sensitivity and specificity of this stool DNA test in detecting colorectal cancer was 100% and 86% respectively.

CONCLUSION: Further validation is crucial to ensure the test performs consistently across our multiethnic population in Malaysia. Encouraging more stool DNA testing in a larger population could potentially improve early detection of CRC and guide future decision making in healthcare policies relating to CRC screening programmes.

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EXPLORING THE INCIDENCE OF INFLAMMATORY BOWEL DISEASE IN MALAYSIA: RURAL VS URBAN

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OBJECTIVE: To compare the incidence of Inflammatory bowel disease in rural vs urban areas in Malaysia.

METHODOLOGY: Two sample populations were selected with Kinta valley representing the urban population whereas Hilir Perak representing the rural areas. Patients diagnosed with IBD from Jan 2022 to Jun 2023 were prospectively recruited and their demographics and clinical characteristics were recorded. Total numbers of the population as a whole and ethnic group were obtained, and the incidence was calculated.

RESULTS & DISCUSSION: In the urban population, there were 15 new cases of IBD diagnosed. The crude incidence rates of IBD, ulcerative colitis (UC), Crohn's disease (CD) and IBD unclassified (IBD-U) were 1.13, 0.45, 0.60 and 0.08 per 100000 persons respectively. The duration of symptoms prior to diagnosis of IBD was 4.75 ± 6.02 months. The mean age of diagnosis was 39.3 ± 15.5 . The highest incidence was among Indians, 3.63 as compared to 0.50 and 1.24 from Malays and Chinese respectively. As for the rural population, 13 new cases of IBD were diagnosed. The crude incidence rates of IBD, ulcerative colitis (UC), Crohn's disease (CD) and IBD unclassified (IBD-U) were 6.11, 4.23, 1.41 and 0.47 per 100000 persons respectively. The duration of symptoms prior to diagnosis of IBD was 19.67 ± 22.66 months. The mean age of diagnosis was 39.46 ± 21.14 . The highest incidence rate was in Indians, 15.72 where Malays and Chinese were 7.18 and 1.78 respectively., 19.67 ± 22.66 months than urban group, 4.75 ± 6.02 months.

CONCLUSIONS: Overall, the incidence of IBD appears to be higher than in an urban population. This suggests a notable disparity in disease burden between rural and urban populations, with rural residents facing a disproportionately higher risk of developing inflammatory bowel diseases. Although the data has to be interpreted with caution due to the small sample size; possible causes include delay in diagnosis and other risk factors such as increased smoking and consumption of ultra processed foods.

DEMOGRAPHIC STUDY AND PREDICTORS OF HOSPITALISATION AND MORTALITY AMONG PATIENTS WITH LIVER CIRRHOSIS ATTENDING A GASTROENTEROLOGY CLINIC IN NORTHERN JOHOR

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OBJECTIVES: There are limited studies on the demographics of liver cirrhosis in Malaysia, in particular, Johor. This study aimed to assess the burden and predictors of hospitalisation and mortality among liver cirrhosis patients in Batu Pahat, Johor.

METHODS: We retrospectively reviewed all liver cirrhosis patients case records in Hospital Sultanah Nora Ismail (HSNI), Batu Pahat, Johor from June 2022 till February 2024. Demographic and clinical characteristics associated with predictors of hospitalisation and mortality were assessed using statistical package for the social science (SPSS).

RESULTS: There were 194 liver cirrhosis patients in Batu Pahat; mostly were males and Malays. The mean duration of hospitalisation is 5.99 days and 26 patients had died. The mean body mass index (BMI) was 25.49 and low density lipoprotein (LDL) value of 2.74mmol/L. There were 25 patients with hepatocellular carcinoma. 43 patients were alcoholic and 7 patients were found to have primary biliary cholangitis. Low LDL was found to be a predictor of hospitalisation (based on multivariate logistic regression (p value: 0.01, 95% CI: 1.17, 3.16) whereas an advancing age was found to be a predictor of mortality among liver cirrhosis patients (based on multivariate cox regression (p value: 0.023, 95% CI: 1.01, 1.08).

CONCLUSION: Liver cirrhosis patients should be monitored frequently especially elderly patients with low LDL to prevent mortality and further hospitalisations.

FROM SUGAR CRISIS TO BLACK ESOPHAGUS: GURVITS SYNDROME - A MULTISYSTEMIC COMPLICATION OF DIABETES MELLITUS

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INTRODUCTION: Acute esophageal necrosis (AEN), also known as Gurvits syndrome or Black esophagus, is a rare condition resulting from systemic hypoperfusion, which causes ischemic injury to the esophagus. Metabolic acidosis, often related to diabetes, is a common precipitating event. We present a case of Gurvits syndrome triggered by metabolic acidosis with diabetic ketoacidosis and sepsis.

CASE DESCRIPTION: A 56-year-old woman with diabetes, hypertension, and end-stage renal failure(ESRF) was admitted with a right gluteal abscess in sepsis with diabetic ketoacidosis. Despite 7 days of IV antibiotics, she deteriorated thereafter she underwent drainage of the abscess. During the third week of hospitalization, she developed hematochezia with hypovolemic shock warranting an OGDS which revealed diffuse ischemic esophagitis throughout the esophagus sparing the LES. We performed several OGDSs due to recurrent upper gastrointestinal bleeding (UGIB), hemostasis was eventually secured with mechanical hemostasis and hemospray. Biopsies confirmed esophagitis with necrotic tissue, with no viral inclusions. She was kept nil by mouth for 1 week and started on total parenteral nutrition (TPN) subsequently she improved with no further bleeding. She is scheduled for an outpatient OGDS for reassessment.

DISCUSSION: Gurvits syndrome is rare, with an incidence of 0.1-0.28%, and has been linked to diabetic ketoacidosis (DKA) and hypoperfusion.² Hyperglycemia in DKA impairs vascular flow, damaging the esophageal mucosal barrier.² Osmotic diuresis in DKA causes significant volume depletion and hypoperfusion, leading to ischemia and necrosis of the esophagus.² Additional comorbidities, such as ESRF, can exacerbate AEN.² Complications may include esophageal stenosis, perforation, and mediastinitis, with infections.¹ Treatment involves high-dose proton pump inhibitors (PPIs), fluid therapy, treating the underlying conditions and monitoring for complications.² Empiric of antibiotics may be necessary if infection or perforation is suspected.²

CONCLUSION: AEN is a rare but potentially life-threatening condition and should be considered as a differential diagnosis in UGIB in patients with numerous comorbid and a black esophagus. Esophagogastroduodenoscopy (OGDS) can confirm the diagnosis, and obtaining a biopsy is recommended unless there is a significant risk of perforation.²

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SYSTEMIC MASTOCYTOSIS WITH GASTROINTESTINAL MANIFESTATION AS THE ONLY INITIAL PRESENTING SYMPTOMS; A CASE REPORT

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INTRODUCTION: Gastrointestinal disorders commonly presents with abdominal pain, bloating, early satiety, and changes in bowel habits. These symptoms may be associated with excess mast cells or their instability in the gastrointestinal tract.

CASE DESCRIPTION: A 48-year-old male patient presented a 1- year history of diarrhea immediately after the consumption of any food, even liquids, accompanied by abdominal pain and weight loss of approximately 15 kg. First colonoscopy was performed in November 2022 and biopsy showing eosinophilic colitis with focal eosinophilic infiltrates on histopathology. Patient was treated as such with eosinophil count ranging 0.24-0.63 x 10⁹/L. Unresolved symptoms prompted a repeat colonoscope on October 2023 which shows macroscopic colitis at caecum. Biopsy shows findings of enterocolitis due to rectal and colonic mast cell infiltrate (terminal ileum, cecum, ascending, transverse, descending and sigmoid colon, rectum) with >15 mast cells per field, immunohistochemistry positive CD 117+ (c-KIT mutation) and CD25. C-KIT D816V mutation was detected, however cytogenetics revealed no abnormalities. Bone marrow aspiration and trephine biopsy were also performed, which shows infiltration of neoplastic mast cells, confirming diagnosis of systemic mastocytosis. Initiation of steroids alleviate the patient's diarrhea and abdominal pain, increased the patient's appetite and helped the patient gain weight.

DISCUSSION: The term "mast cell enterocolitis" was proposed by Jakate in 2006 to describe an increase of mast cells in mucosal biopsies from patients with chronic diarrhea. This report describes an interesting case of a rare cause of chronic diarrhea. It is important to consider this diagnosis in the work up of intractable diarrhea. In the absence of documented cutaneous lesions, the diagnosis of systemic mastocytosis may be easily missed due to its relative rarity and such gastrointestinal symptoms can be compatible with inflammatory bowel syndromes, thus highlighting the importance of endoscopy, biopsy and histopathology in the diagnosis of this disease.

CROHN'S DISEASE AND ADULT-ONSET STILL'S DISEASE: UNVEILING THE MASQUERADE OF CHRONIC ILLNESS

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INTRODUCTION: Concomitant diagnosis of Crohn's disease (CD) and adult-onset Still's disease (AOSD) is rare. It is conceivable that both conditions share a genetic or immunological link, although data is insufficient. We report a case of CD preceding AOSD.

CASE PRESENTATION: A 26 year old female diagnosed with Crohn's Disease in 2022 following a presentation with per rectal bleeding and abdominal pain, which responded well to steroid treatment. 6 months after the diagnosis of CD, she developed recurrent fever, sore throat, severe hair loss and maculopapular rash on the upper limbs and body. She denied associated gastrointestinal symptoms to suggest an IBD flare. Clinical examination revealed alopecia, salmon-pink rash over limbs and trunk as well as submental lymphadenopathy. CT imaging revealed axillary lymphadenopathy and splenomegaly. The initial blood tests showed raised inflammatory markers and Ferritin levels coupled with transaminitis. Autoimmune panel and serial blood cultures were negative. Yamaguchi's classification criteria were applied, as the clinical presentation suggested a plausible onset of AOSD. A positivity for 3 major and all 4 minor criteria were found. The diagnosis was also supported by Fautrel Criteria, meeting 4 out of the 6 major criteria and both minor criteria. Considering the dual underlying pathology, azathioprine was initiated following rheumatology consultation. The patient has responded well and remained in remission for the past year.

DISCUSSION: The coexistence of AOSD and CD is exceedingly rare. Furthermore, identifying alternative diagnoses for extra-intestinal manifestations in IBD is challenging, as it entails a process of exclusion given the absence of disease-specific symptoms. The diagnostic process can be guided by Yamaguchi's classification or Fautrel criteria. Despite the absence of joint pain being one of the major criterion, a high index of suspicion of AOSD persisted due to the clinical presentation. Azathioprine was preferred over methotrexate in this case due to the patient's reproductive age and absence of arthritis.

ANCIENT REMEDIES, MODERN RISKS: CASE SERIES OF ACUTE LIVER FAILURE DUE TO TRADITIONAL COMPLEMENTARY MEDICINE

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INTRODUCTION: Traditional Complementary Medicine (TCM) is widely used in Asia and can occasionally lead to fulminant liver failure. These case series highlight the potential severe hepatotoxicity associated with TCM use, even in patients without pre-existing liver disease, and emphasize the importance of thorough medication history in evaluating unexplained liver injury.

CASE SERIES: Case 1: A healthy 30-year-old woman presented with acute liver failure (AST 15,210 U/L, ALT 9,520 U/L) with hyperbilirubinemia (463 μmol/L), coagulopathy (INR 4.2) after taking unspecified TCM for 3 months. After 2 cycles of PLEX, she recovered fully without liver transplantation.

Case 2: A 41-year-old Thai woman presented with recurrent liver injury progressing to ALF as per evidenced by elevated liver enzymes: AST 9660 U/L, ALT 1438 U/L, hyperbilirubinemia (273 µmol/L), coagulopathy (INR 1.9) and hepatic encephalopathy grade III. Further history revealed that she has been consuming TCM containing Borneolum Syntheticum for 3months. Despite aggressive management including N-acetylcysteine, plasma exchange (PLEX), she succumbed to complications. Otherwise, she did not have the option of liver transplantation.

DISCUSSION: Both cases demonstrated severe hepatotoxicity linked to TCM use. TCM-induced liver injury can manifest as hepatocellular, cholestatic, or mixed patterns. This report emphasizes the importance of thorough medication history, including TCM, when evaluating unexplained liver injury. Although both cases fulfilled the King's College Criteria for ALF, the option of liver transplantation was limited. PLEX can served not only as a bridging therapy, but also as a definite rescue therapy for selected patients with ALF.

A PROSPECTIVE OBSERVATIONAL STUDY ON THE EPIDEMIOLOGICAL PROFILE AND CLINICAL OUTCOME OF PATIENTS PRESENTING WITH UGIB AT A SINGLE CENTER IN EAST MALAYSIA

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BACKGROUND AND OBJECTIVES: Upper gastrointestinal bleeding (UGIB) is an emergency involving bleeding in the upper gastrointestinal tract. This study aims to provide a comprehensive overview of the clinical characteristics and the outcomes at a single centre in East Malaysia.

MATERIAL AND METHODS: This prospective observational study was conducted at a single-center tertiary care. We enrolled all consecutive patients with suspected UGIB from March 2024 to June 2024. All procedures were performed within 24 hours of clinical presentation. Data collected included age, sex, presenting symptoms, and pre-endoscopic Rockall and Glasgow-Blatchford Scores. All patients were followed up until discharge. Blood transfusion needs, length of hospital stay, rebleed rates and mortality outcomes were analyzed.

RESULTS: 113 patients were included in the study. Mean age of patients was 54 ± 14 years. 81 (71.6%) were male. The average Rockall Score was 4.46 ± 1.75 , and the Glasgow-Blatchford Score was 11.46 ± 3.15 . Blood transfusion was required in 62 patients (54.9%).80/113 patients (70.8%) had non variceal UGIB, of which 35 patients (30.4%) had Forest IIa ulcers and above, requiring endoscopic intervention. Adrenaline injection with thermocoagulation was required in 24 patients and adrenaline injection with hemoclip required in 11 patients. The remaining 33 patients with variceal bleeding were treated with endoscopic variceal ligation. Rebleeding rates occurred in 28 patients (24.8%) within 30 days. Radiological intervention was required for 2 patients (1.8%) after failed endoscopic treatment and there was 1 reported death (0.9%).

DISCUSSION: Peptic ulcer disease was the most common cause of UGIB. The Rockall and Glasgow-Blatchford Score was higher mean score of 6 and 12 respectively in both the patients who required interventional radiology procedures and both succumbed within 30 days due to sepsis. Majority of patients had successful endoscopic intervention while patients who had failed endoscopic therapy succumbed within 30 days.

CONCLUSION: This study offers insights into UGIB prevalence, etiology, and predictive outcomes in East Malaysia while affirming the need to risk stratify the patients according to existing UGIB risk scores.

A PARADIGM SHIFT IN MANAGEMENT OF COMPLEX MALIGNANT OBSTRUCTION: SYNERGISTIC APPLICATION OF ENDOSCOPIC ULTRASOUND GUIDED GASTROJEJUNOSTOMY (EUS-GJ) AND ENDOSCOPIC ULTRASOUND GUIDED HEPATICOGASTROSTOMY (EUS-HGS)

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OBJECTIVES: To report the successful use of endoscopic ultrasound-guided gastrojejunostomy (EUS-GJ) and hepaticogastrostomy (EUS-HGS) in managing gastric outlet obstruction and biliary obstruction in a patient with metastatic pancreatic adenocarcinoma.

CASE REPORT: A 47-year-old female with a history of neck of pancreas adenocarcinoma with peritoneal and liver metastases, previously treated with FOLFIRINOX regimen, presented with a 4-day history of post-prandial vomiting, abdominal pain and lethargy. Clinically, patient was jaundice and has epigastric tenderness. Past endoscopic interventions included duodenal stenting and EUS-guided fine-needle biopsy confirming adenocarcinoma.

RESULTS: Her laboratory testing showed worsening liver function with hyperbilirubinemia (126 μmol/L), Alanine Transaminase (ALT) 449 U/L, Aspartate Aminotransferase (AST) 214 U/L, Gamma-glutamyl Transferase (GGT) 721 U/L, and Alkaline Phosphatase (ALP) 363 U/L. CA 19-9 had increased to 5882 U/mL. Gastroscopy revealed a displaced and disintegrated duodenal stent with tumoral invasion. Positron emission tomography—computed tomography (PET-CT) demonstrated disease progression with worsening metastases and biliary obstruction. Endoscopic ultrasound guided gastrojejunostomy (EUS-GJ) was performed using a 20mm x 10mm electrocauterylumen-apposing metal stent (LAMS). Endoscopic ultrasound guided hepaticogastrostomy (EUS-HGS) was successfully completed using a 10cm partially covered hybrid self-expandable metal stent (SEMS). Post-procedure, the patient's liver function improved and was able to resume soft diet.

DISCUSSION AND CONCLUSION: This case demonstrates the success of combined EUS-GJ and EUS-HGS in managing complex malignant obstructions. Some studies demonstrated that EUS-GJ to be superior to enteral stenting, with lower reintervention rates and higher clinical success rates. On the other hand, EUS-HGS has emerged as a viable alternative to percutaneous drainage. The positive outcome in this case highlight the importance of learning these advanced techniques from local and international experts to elevate the standard of care in managing patients with advanced malignancies.

RAPID DIAGNOSIS OF OBSCURE GI BLEEDING IN A HIGH-RISK CARDIAC PATIENT: REAL-WORLD EXPERIENCE WITH AI-ASSISTED CAPSULE ENDOSCOPY

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OBJECTIVES: To describe our experience using Artificial Intelligence (AI)-assisted capsule endoscopy in diagnosing obscure gastrointestinal bleeding (GIB) in a high-risk patient with a recent non-ST elevation myocardial infarction (NSTEMI).

CASE REPORT: A 79-year-old man with background history of coronary artery disease presented with NSTEMI and has undergone percutaneous coronary intervention (PCI). He was initiated on antiplatelet therapy as the treatment for his NSTEMI. However, he developed melena and his haemoglobin dropped until 6.4g/dL causing a challenge in the continuation of medical therapy for NSTEMI. Conventional diagnostic methods, including upper endoscopy, colonoscopy, and CT angiography, failed to identify the bleeding source. The patient's hemoglobin continued to drop by 1 g/dL daily despite multiple packed cells transfusions. We then employed Al-assisted capsule endoscopy (NaviCam® SB System with ProScan™ AI) to identify the pathology for his persistent anemia.

RESULTS: Initial colonoscopy showed fresh clots from the rectum until the cecum and fresh blood in the terminal ileum, indicating a possibility of small bowel bleed. The upper endoscopy was normal. A second colonoscopy, reaching 60 cm into the ileum, showed no bleeding. Al-assisted capsule endoscopy quickly detected mid-jejunal bleeding within minutes upon initiation of its ProScan™ Al feature, displaying a much faster analysis than the manual review methods. This rapid detection led to a surgical intervention, which is an exploratory laparotomy with on-table enteroscopy that confirmed an arteriovenous malformation 70 cm beyond the duodenojejunal flexure, which was successfully resected.

CONCLUSION: Our experience highlights the transformative potential of Al-assisted capsule endoscopy in managing obscure GIB. The quick and precise detection via this Al technology was crucial for timely surgical intervention in our high-risk patient. This swift and accurate interpretation enabled prompt management, essential in cases where ongoing bleeding can delay critical antiplatelet therapy.

CROHN'S DISEASE MIMICKING A PENETRATING SIGMOID TUMOUR

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Crohn's disease has been known to imitate other illnesses such as tuberculosis, diverticulitis and others including tumours. The usual site of colonic Crohn's disease, as observed in the past, is at the ileocecal area and it is usually presented as a stricturing disease. Tumefactive Crohn's disease is mostly infrequent, what more in the sigmoid area. We present a rare case of penetrating sigmoid pseudotumor of Crohn's disease of a 59 years old gentleman who came with a 6 months history of diarrhoea and constitutional symptoms. Initial colonoscopy found mild colitis in the rectosigmoid area and biopsy revealed an active colitis with subtle chronicity where he was treated for infection. Subsequently, he developed clinical features of intestinal obstruction which emergency laparotomy done unveiled a tumour at sigmoid with infiltration to the bladder, and diversion transverse colostomy was decided intra-operatively. Colonoscopy post-operation found a rectosigmoid mass 20 cm from the anal verge and the biopsy showed an active colitis with mild chronicity. With the differential diagnosis of malignancy in mind, a repeated colonoscopy and biopsy were done. However, the verdict remained ambiguous. Consequently, the serial biopsy samples were sent for a second opinion from an IBD-Histopathologist which concluded the features of Crohn's disease.

NEUROTOXICITY INDUCED BY METRONIDAZOLE THERAPY IN A PATIENT WITH CROHN'S DISEASE

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CASE PRESENTATION: We report a case of a 15 year old boy of Dusun ethnicity with underlying biologic naive fistulating Crohn's disease. MRI pelvis revealed an active single tract perianal intersphincteric sinus tract with clinical evidence of pus discharge. He was started on PO Metronidazole 400mg TDS and PO Ciprofloxacin 500mg BD. A month later, he presented with symptoms of tingling and numbness of both lower limbs with neuropathic pain, resulting in difficulty in ambulation. Neurological examination showed signs of cerebellar dysfunction (horizontal nystagmus with lateral gaze and intention tremors). Patchy loss of light touch sensation of the feet was noted. Blood investigation revealed electrolyte abnormalities (hypokalaemia, hypocalcemia, hypomagnesemia, hypophosphatemia), however symptoms persisted even after correction. Metabolic panel were normal. Metronidazole was stopped. Nerve conduction study showed diffuse symmetrical sensorimotor axonal polyneuropathy. His symptoms resolved completely after withholding metronidazole and with supplementation of intravenous thiamine.

DISCUSSION: Metronidazole acts by inhibiting synthesis of protein through the disruption of DNA structure. The adverse reactions to metronidazole are usually mild gastrointestinal disturbances. However, there are reports of peripheral neuropathy and to a lesser extent cerebellar syndrome associated with metronidazole therapy. A systematic review of 36 case reports published in 2018 had reported higher incidence of metronidazole induced peripheral neuropathy in patients receiving a total dose of >42g over the course of >4 weeks, which is what our patient received. Conventional nerve conduction studies in cases of metronidazole induced neuropathy show axonal sensory neuropathy features.

CONCLUSION: We highlight this case report to increase awareness among clinicians regarding neurotoxic side effects of metronidazole, especially during prolonged therapy. Fortunately, most cases show resolution of the side effects after cessation of the drug. In our patient, the diagnosis of metronidazole induced neuropathy was made by clinical assessment and confirmed by nerve conduction study.

CASE SERIES OF ACUTE HEPATITIS A INFECTION CAUSING ALF/ACLF WITH PREVALENCE AND OUTCOME OF THE INFECTION IN SABAH - RETROSPECTIVE OBSERVATIONAL STUDY

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INTRODUCTION: Hepatitis A is usually a benign, self-limiting disease but cases of ALF/ACLF have been reported. We aim to examine disease prevalence and outcomes while describing three such cases.

METHODOLOGY: Retrospective assessment of Hepatitis A IgM serology processed in HQE Sabah from January 2023 - July 2024. Cohort were subdivided to elevated liver-associated enzymes with no coagulopathy (ELEC), acute liver injury (ALI), acute liver failure (ALF), acute-chronic liver failure (ACLF) and acute decompensation.

RESULTS: 1296 Anti-HAV IgM test were carried out, (893) 2023 and (457) 2024 with a 3% (n=40) positive rate.

57% males (median age; 31). In 2023, all Hepatitis A cases showed ELAC with zero ALI/ACLF/deaths. In 2024, 71.5% were ELAC; 2 ALI; 1 ALF; 2 ACLF; 1 acute decompensation with 2 deaths.

CASE 1: 66-year-old lady presented with 4 days of jaundice and decreased consciousness. She was treated for hyperacute liver failure and due to severe metabolic acidosis with hyperlactemia, CVVHD was initiated. 72 hours later standard volume plasma exchange was initiated in view of persistently high SOFA/ALFED scores. Post 4 sessions of PLEX, she achieved normalization of coagulopathy, marked improvement of LFT and successful extubation. Nevertheless, she succumbed to sepsis almost two months later.

CASE 2: 35-year-old with MASLD presented with 2 weeks of jaundice and marked lethargy. He progressed to ACLF complicated with hepatorenal syndrome while in ward. Standard medical therapy was instituted and a spontaneous recovery not needing bridging therapy or transplant referral. He was discharged well.

CASE 3: 55-year-old with MASLD presented with fever, jaundice and GI losses for 7 days with clinical ascites. She was diagnosed with ACLF with grade 2 encephalopathy. Standard medical care was initiated. Though she achieved resolution of encephalopathy, she developed CRE Klebsiella infection and died.

CONCLUSION: Hepatitis A vaccination should be mandatory in liver cirrhosis and expanded to all chronic liver disease patients.

PROSPECTIVE OBSERVATIONAL STUDY ON THE CLINICAL OUTCOME OF PATIENTS WITH SUSPECTED UPPER GASTROINTESTINAL BLEEDING (UGIB) REFERRED FROM DISTRICT HOSPITALS TO A TERTIARY CENTER IN EAST MALAYSIA

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OBJECTIVES: In managing UGIB, initial resuscitation, timing to endoscopy, comorbidities, Rockall and Glasgow-Blatchford Scores (GBS) are crucial. This study assesses outcomes among UGIB patients referred from district hospitals.

MATERIAL AND METHODS: This prospective observational study was conducted at an urban tertiary center that serves as a referral centre for hospitals within a 180 km² radius. All consecutive patients with suspected UGIB were enrolled between March 2024 and July 2024 underwent gastroscopy within 24 hours. Demographic data, presenting complaints, and pre-endoscopic Rockall and GBS were recorded. Patients were followed up until discharge, and outcomes such as blood transfusion need, length of hospital stay and mortality rates were analyzed.

RESULTS: A total of 38 patients were enrolled in the study. The mean age of patients presenting with suspected Upper Gastrointestinal Bleeding (UGIB) was 51±12 years. Of these patients, 20 (52.6%) were male. Peptic ulcer disease was the most prevalent cause, affecting 28 patients (73.7%). The most common presenting symptoms were melena, observed in 26 patients (68.4%), followed by hematemesis in 8 patients (21.1%). The mean Rockall Score was 3.46±1.65 and mean GBS was 10.46±2.15. Blood transfusion was required in 12 patients (31.6%). There were no cases of rebleeding however, there were 1 reported death (2.6%) in our study.

DISCUSSION: Proximity to tertiary care centers offering endoscopic and surgical interventions has historically been deemed crucial for effective management of UGIB. The assumption was that quicker access leads to better outcomes, such as reduced mortality and shorter hospital stay. However, in our study there were no reported rebleeds in addition to a low mortality rate (1 death).

Further to this, recent evidence suggests that the quality of initial management at primary care level may be more crucial to patients' recovery and survival than the distance to tertiary centers.

CONCLUSION: This study demonstrates that the outcome of patients with UGIB is not determined by the geographic distance to the tertiary centers.

GOLDEN YEARS AND ERCP: ASSESSING SAFETY AND SUCCESS IN ELDERLY PATIENTS

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INTRODUCTION: Endoscopic retrograde cholangiopancreatography (ERCP) is widely regarded as an effective treatment for bilio-pancreatic diseases. The aim of this study is to evaluate the therapeutic efficacy and complication rates associated with ERCP procedures among elderly patients who are 80 years and above.

METHODS: All patients aged 80 years and above who underwent ERCP from January 2023 to June 2024 were retrospectively analyzed.

RESULTS: A total of 46 patients underwent 51 ERCP procedures, ranging from 1 to 3 procedures per patient, provided 51 procedures for final analysis. The most common indication was choledocholithiasis (90.5%) followed by malignant strictures (9.5%). Conscious sedation using intravenous midazolam and pethidine were administered in 72.8% of cases, while 27.2% required general anesthesia. 96.3% of procedures were successfully completed at the first attempt. Complications such as cholangitis and pancreatitis occurred in 4.2% and 3.5% respectively. No procedural related mortality was reported in this study.

DISCUSSION: One of the main challenges in performing ERCP in elderly patients is the heightened risk of procedural complications, such as post-ERCP pancreatitis, bleeding, perforation, and cardiopulmonary events. However, our study demonstrates a lower rate of complications in the elderly population compared to the current literature. ERCP can be performed successfully in elderly patients, as it can significantly enhance symptom resolution, quality of life and carries better prognosis in this group of patients. Overall, patient tolerance for the procedure was generally favorable.

CONCLUSION: Our study demonstrates a favorable outcome with regards to safety and success in patients aged 80 and above undergoing ERCP. Lower rate of complications were also observed in our study despite the subjects being elderly.

BETWEEN A ROCK AND A HARD PLACE - GIANT CALCULOSIS WITHIN A CHOLEDOCHAL CYST

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INTRODUCTION: Choledochal cysts are congenital cystic dilatations of the biliary tract. In certain instances, a large stone may form within the common bile duct (CBD) due to prolonged bile stasis. Here, we present a case of a giant calculosis within a choledochal cyst.

CASE DESCRIPTION: A 52-year-old lady with no comorbid presented with a 5 months history of jaundice associated with 3 weeks of abdominal distension, loss of appetite and weight. A contrast enhanced computed tomography of abdomen revealed a heterogenous, non-enhancing mass spanning the entire length of CBD measuring 4.6x6.7x9.8cm and extending into the right intrahepatic duct (IHD). Notably, there was also evidence of liver cirrhosis and ascites. The initial impression was to rule out cholangiocarcinoma with newly diagnosed Child's B liver cirrhosis secondary to Chronic Hepatitis B. Endoscopic ultrasonography (EUS) revealed a large choledocholithiasis within a grossly dilated CBD. We proceeded with an endoscopic retrograde cholangiopancreatography (ERCP) which confirmed a large filling defect measuring 10x6cm within the CBD, in keeping with a giant choledochal calculosis. Biliary stenting was then performed to relieve obstruction. She was then referred to the hepatobiliary team for biliary reconstructive surgery.

DISCUSSION: The two commonest complications of choledochal cysts are stones and malignancy. Giant choledochal calculosis may often mimic cholangiocarcinoma on imaging. ERCP with mechanical or laser lithotripsy may be attempted, however in certain instances, surgical intervention is required due to the calculi size. Nevertheless, bile duct excision and reconstruction through bilioenteric anastomosis remains the definitive treatment for choledochal cyst due to the potential risk of malignancy.

CONCLUSION: Coexisting choledochal cyst with a giant calculosis occurrence is rare. Imaging alone may not be adequate to exclude a cholangiocarcinoma. EUS followed by ERCP and biliary stenting is a crucial temporizing procedure prior to definitive surgical treatment.

OUT OF SIGHT, OUT OF MIND: A SINGLE-CENTER EXPERIENCE WITH THE APPROACH AND COMPLICATIONS OF NEGLECTED BILIARY STENTS

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INTRODUCTION: Biliary stent placement has become a crucial intervention in the management of various biliary disorders, including choledocholithiasis and malignant biliary obstruction. However, the long-term success of these stents is often limited by complications such as infections, stent occlusion and stent migration which can be mitigated by stent replacement or removal within 3-6 months.

OBJECTIVE: To evaluate the management and outcome of neglected biliary stents in patients presenting with cholangitis.

METHODS: From January 2022 to May 2024, a total of 10 patients were admitted with cholangitis secondary to neglected biliary stents. These patients had previously undergone Endoscopic Retrograde Cholangiopancreatography (ERCP) and plastic stent placement for choledocholithiasis due to incomplete stone clearance. The duration of stent neglect ranged from 1 to 10 years. All patients presented with jaundice, abdominal pain, and deranged liver function tests. They were treated with antibiotics and underwent ERCP.

RESULTS: Seven (7/10) patients had their stents removed successfully on the first ERCP attempt. Three (3/10) patients had complications related to stent migration: 1 with proximal migration and 2 with distal migration. The patient with proximal migration had a stent fracture during retrieval attempts using rat-tooth forceps and required SpyGlass cholangioscopy for fragment retrieval. Another patient had a stent embedded in the duodenal wall, which was successfully removed using rat-tooth forceps, followed by duodenal wall defect closure using two hemoclips. The third patient had a stent embedded in the distal common bile duct (CBD) wall, which failed two endoscopic removal attempts, one of which was complicated by post-ERCP pancreatitis. This patient ultimately required surgical intervention for stent retrieval.

CONCLUSION: Neglected biliary stents can lead to significant complications, including cholangitis, stent migration, and embedding into surrounding structures. Successful management requires advanced techniques and interventions. Maintaining a stent registry and follow ups are crucial to prevent severe complications and improve patient outcomes.

BEYOND THE SURFACE: EXPLORING GI PSEUDOLIPOMATOSIS THROUGH TWO UNIQUE CASES

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We report two cases of gastrointestinal (GI) pseudolipomatosis.

CASE 1: A 57-year-old woman with liver cirrhosis secondary to a long history of traditional medication intake underwent colonoscopy for colorectal cancer screening due to a strong family history of colon cancer. The colonoscopy revealed diverticular disease and an incidental finding of multiple raised whitish plaques ("snow white" sign) in the descending and transverse colon. Biopsies of these lesions were performed.

CASE 2: A 57-year-old man with chronic Hepatitis B, diabetes mellitus and dyslipidemia presented with hematemesis. Esophagogastroduodenoscopy (EGD) showed findings of nodular gastritis in the corpus with no obvious source of bleeding. However, on withdrawal of the endoscope, the previously normal appearing duodenal mucosa displayed a whitish foamy appearance. Biopsy was not performed.

The endoscope was disinfected with peracetic acid and hydrogen peroxide-based solution pre-procedure.

Histopathology of the first case showed colonic mucosa with variably sized and shaped air vacuoles surrounded by lamina propria elements. No granuloma or malignancy was identified. The air vacuoles tested negative for S100 protein, ruling out intramucosal lipoma.

DISCUSSION: GI pseudolipomatosis is a benign but rare condition. Its etiology has been the subject of various hypotheses, including the effects of air pressure during colonoscopic air insufflation as well as chemical reaction to the GI mucosa due to the contamination of the endoscope's air-water channel with disinfectants like peracetic acid and hydrogen peroxide. Our cases support the latter hypothesis, given the use of similar disinfectants. Multiple studies have found that the use of hydrogen peroxide-based disinfectants can increase the prevalence of pseudolipomatosis by up to 2-32%.

CONCLUSION: GI pseudolipomatosis is a rare condition with distinct endoscopic and histological features. Increased awareness among endoscopists is essential for accurate identification and understanding of its etiology.

CHOLANGIOSCOPY-GUIDED HOLMIUM LASER LITHOTRIPSY FOR LARGE BILE DUCT STONES - RETROSPECTIVE ANALYSIS

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INTRODUCTION: Laser lithotripsy of bile duct stones widely accepted endoscopic treatment modality for giant, impacted or very hard stone.

OBJECTIVE: This study objective is to asses safety and efficacy of the procedure.

METHODS: We report 32 cases of cholangioscopy guided laser lithotripsy performed at our centre from Dec 2021 till July 2024. All cases had undergone at least one ERCP with failed stone extraction previously. The procedure was performed using Boston Scientific SpyGlass Digital-Imaging System, Light trail laser fibre (Holmium 30W Thulium 80W) which delivers high-energy pulses (1800mJ).

RESULTS: Patient demographic data showed, the mean age is 52 with female preponderance (59%). 44% of the patients were from Bajau ethnicity and followed by Dusun ethnicity 22%. The commonest presenting complaints were right hypochondriac pain (94%) and jaundice (72%). 16 patients (50%) have no prior medical illness, 11 patients (34%) had hypertension and 3 (9%) patients had dyslipidemia, and 2 (6%) patients had chronic kidney disease and another 2 (6%) had beta thalassemia. 3 patients had undergone cholecystectomy before.

The mean duration of the procedure was 83 minutes. Mean common bile duct (CBD) diameter was 15mm proximally and 9.3mm distally. One patient had an ectatic CBD and one had distal CBD benign stricture. 24 (75%) of the patients had a single stone. Mean size of the stone was 17mm x 20mm and predominantly located at mid CBD (57%). The stones were successfully fragmented in a single session. All patients were stented to reduce risk of post procedural cholangitis. No complications (cholangitis, pancreatitis and perforation) were reported during their hospital stay.

CONCLUSION: From our study, laser lithotripsy is both safe and effective to treat large bile duct stones in patients who failed previous ERCP stone clearance. In addition, it negates the need for operative procedures for such patients. This can be a preferred modality when available.

REVOLUTIONIZING GI BLEED MANAGEMENT: SUCCESSFUL USE OF THE OVER-THE-SCOPE-CLIP (OTSC) PADLOCK CLIP IN MANAGING A CASE OF LIFE-THREATENING GI HEMORRHAGE

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INTRODUCTION: The OTSC padlock is an over the scope full circumferential tissue closing system initially developed for Natural Orifice Transluminal Endoscopic Surgery (NOTES). It can also be used to treat bleeding peptic ulcers, where hemostasis using conventional methods have failed. This case highlights the use of the padlock clip in a case of massive GI bleeding.

CASE REPORT: A 81 year old lady presented to the emergency department (ED) with hematemesis and melena. She was pale and hemodynamically unstable with pulse rate of 110 beats/min and blood pressure of 63/43 mmHg requiring inotropes. Hemoglobin was 7.6 g/dL with a platelet count of 298,000/cm3. Oesophagogastroduodenoscopy (OGDS) was performed in the ED after initial resuscitation. There was a 2cm Forest 1a ulcer at D1. Hemostasis was attempted with adrenaline injection (total 74mls) and thermocoagulation using the gold probe device. An on table surgical referral was made due to failure to secure hemostasis, however patient was deemed unsuitable for surgery due to advanced age and severe lactic acidosis (pH 7.08, HCO3 8.6 mmol/L, lactate 12.9 mmol/L). After further consideration, an OTSC Padlock clip was deployed as a salvage attempt at hemostasis. The device apposed the ulcer edges and successfully arrested the bleed. During the course of the procedure a total of 7 pints of packed cells were transfused. Patient was discharged well after 19 days of hospital stay.

DISCUSSION: Currently there are two OTSC devices available, the Ovesco clip and Padlock clip. The Padlock design however, which has inner prongs provide a firmer grasp and do not require the operating channel of the endoscope. It also apposes the edges without the need for a twin grasper and remains attached to tissue longer, thereby allowing for complete healing.

CONCLUSION: This case demonstrates the efficacy of the padlock device when surgery is not feasible and conventional endoscopy measures fail.

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ADVANCING ENDOSCOPIC TECHNIQUES: SINGLE-CENTER INSIGHTS ON LASER LITHOTRIPSY WITH A NEW FLEXIBLE CHOLEDOCHOSCOPE

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BACKGROUND: The history of peroral cholangioscopy dates back over 40 years. However, its popularity was initially limited by the technical constraints of cholangioscopes during the following decades. The introduction of SpyGlass technology more than a decade ago marked a significant advancement in the field. Recently, the Leinzett flexible video choledochoscope has emerged as a new contender in interventional endoscopy. We present two cases utilizing the newly launched Leinzett single-use flexible video choledochoscope.

CASE 1: A 32-year-old man with a history of recurrent ascending cholangitis was electively admitted for ERCP cholangioscopy with laser lithotripsy due to a previously failed attempt to clear a large mid-common bile duct (CBD) stone. Cholangioscopy was performed using the Leinzett LAN-EP-3522 choledochoscope. Holmium laser was employed to fragment the 20 mm choledocholithiasis. The procedure, which lasted approximately 90 minutes, was successful. Given the incomplete clearance of stone fragments, a plastic CBD stent was inserted.

CASE 2: A 75-year-old gentleman with history of ascending cholangitis secondary to a large choledocholithiasis, underwent cholangioscopy with laser lithotripsy. Cholangioscopy was performed using Leinzett LAN-EP-2612 choledochoscope. Holmium laser was then used to fragment the two 15mm mid-CBD and CHD stone. Procedure ended successfully after 90 minutes where multiple stone fragments were removed. Patient was stented in view of incomplete stone clearance.

DISCUSSION AND CONCLUSION: The Leinzett choledochoscope represents a viable alternative to the SpyGlass cholangioscopy system. It features a smaller caliber while maintaining superior image quality with a resolution of 160,000 pixels, compared to SpyGlass's 90,000 pixels. With the world's smallest processor, its design eliminates the need for a trolley or fixed table processor, making it highly portable and compatible with mobile devices such as tablets and smartphones. This combination of features enhances convenience and broadens the scope of accessible and effective biliary tract examinations in clinical practice.

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