MALAYSIAN SOCIETY OF
GASTROENTEROLOGY AND HEPATOLOGY

GUT 2014

MSGH Annual Scientific Congress

&

ECCO

(European Crohn's and Colitis Organisation)

Educational Workshop

22nd – 24th August 2014

Shangri-La Hotel
Kuala Lumpur, Malaysia

Souvenir Programme
& Abstract Book

Contents

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	Dr Tee Hoi Poh
	Prof Dato' Dr Goh Khean Lee
	Prof Dato' Dr P Kandasami

Message from the President, MSGH & Organising Chairperson, GUT2014

It gives me great pleasure to welcome all delegates and our distinguished faculty to GUT 2014. To first time visitors to Kuala Lumpur – "Selamat Datang" – and to the rest, welcome back to a familiar and reliable venue – the Shangri-La Hotel, Kuala Lumpur. On behalf of the Malaysian Society of Gastroenterology and Hepatology (MSGH), I am proud to say that our Annual Scientific Congress continues to deliver some of the highest standards of education in the South East Asian region, with GUT 2014 this year being no exception. For the first time this year, GUT 2014 is being held in conjunction with a one-day European Crohn's and Colitis Organisation (ECCO) Educational Workshop, the first of such an event to be held in the South East Asian region. The scientific programme committee, led by Dato' Dr Tan Huck Joo, together with Prof Dato' Dr Goh Khean Lee and Assoc Prof Dr Raja Affendi Raja Ali, have done a sterling job in putting together a varied programme, covering a broad spectrum of gastroenterology and hepatology. We, in MSGH, have also worked hard to bring you leading experts from both Asia and the rest of the world, to update you with the latest developments in the field. GUT 2014 would not be possible without the assistance from our partners in the biomedical industry, and I would like to thank all of them, on behalf of MSGH, for their continued support.

Wishing you a fruitful and enjoyable time over the next three days in GUT 2014 – the ONLY major Annual Scientific Congress in Gastroenterology and Hepatology in Malaysia.

Prof Dr Sanjiv Mahadeva

14th MSGH Distinguished Orator – Professor Dr Patrick Kamath

Citation by Professor Dr Sanjiv Mahadeva

Patrick S Kamath is Professor of Medicine at the Mayo Clinic College of Medicine and Consultant Gastroenterologist and Hepatologist at the Department of Medicine, Mayo Clinic, Rochester, Minnesota. He graduated in 1976 from St John's Medical College, Bangalore University in Karnataka, India and subsequently, underwent postgraduate training at the Postgraduate Institute of Medical Education & Research in Chandigarh, India, where the foundation for his academic interest in the field of Gastroenterology were laid. Even in the early years of his career, Professor Kamath had demonstrated academic excellence by obtaining awards such as the Jane and Camillo Patrao Prize in Internal Medicine at St John's Medical College and the Kataria Gold Medal (an award for the most outstanding postgraduate student) at the Postgraduate Institute of Medical Sciences, New Delhi, India. It is no surprise then that he quickly rose to the position of Associate Professor and then Professor and Chief at the Department of Gastroenterology, St John's Medical College, Bangalore University, in the late 1980's.

In 1991, Professor Kamath moved to the US and took up the position of Assistant Professor of Medicine at the Mayo Clinic College of Medicine. His passion for teaching became evident very soon after, when he started winning "Teacher of the Year in Internal Medicine" awards at the Mayo Graduate School of Medicine, from 1993 onwards. In 1995, he was inducted into the "Hall of Fame for Teacher of the Year in Internal Medicine", a position that he held steadily until 2002. In 2001, he was appointed as Professor of Medicine. For his leadership in Internal Medicine and Gastroenterology, in the education of future physicians and his exemplary care of patients, Professor Kamath was awarded the Henry J Plummer Distinguished Physician award for the Department of Internal Medicine, in 2003. This was soon followed by the Distinguished Educator Mayo Foundation award in 2005.

Professor Kamath's academic record has not been out-shone by his recognition for teaching. Although his initial research interest was in Gastroenterology, his focus had turned towards Hepatology in the later years. His research has appeared in top-ranking journals including the New England Journal of Medicine, Gastroenterology and Hepatology, and he has even served on the Editorial Board as Associate Editor for Hepatology and Clinical Gastroenterology and Hepatology. With more than 180 publications to his name, he has published widely in various fields, but particularly in the study of clinical outcomes related to cirrhosis and portal hypertension, vascular diseases of the liver, and polycystic liver disease. However, he is mostly known for his work in the development of the Model for End-Stage Liver Disease (MELD) score. Although initially developed to predict outcomes in cirrhotic patients undergoing the TIPS procedure, it has been shown to be a valuable tool in predicting outcome for liver transplantation. A true example of translational research, the MELD score is now being used to direct the process of organ allocation for liver transplantation in the United States. So famous is the MELD score, that even Wikipedia has a write-up on the tool and its developer! With this achievement, and even more, it is not surprising that Professor Kamath was appointed to the Master's Faculty Privileges in Clinical and Translational Science at the Mayo Graduate School in 2007.

Professor Kamath has been a much sought-after speaker at numerous International Meetings around the world. He has been a "State-of-the-art" lecturer at DDW and a regular feature at the "Meet-the-Professor" sessions in the AASLD annual meetings. We, at the Malaysian Society of Gastroenterology and Hepatology, are truly honoured to have a Giant in the field of Internal Medicine and Hepatology grace our humble scientific congress in 2014.

11th Panir Chelvam Memorial Lecturer – Professor Dr John A Windsor

Citation by Dr Mohd Akhtar Qureshi

John Windsor is an Upper GI surgeon based at Auckland City Hospital with a particular clinical in pancreatology, and Professor of Surgery at the University of Auckland with an active research programme focussed on the pathophysiology and management of acute pancreatitis. He is Director of the Surgical Research Network, incorporating the Applied Surgery and Metabolism Laboratory and the Surgical Centre for Outcomes Research and Evaluation, Founding Director of SIMTICS Ltd and Associate Director of the national Medical Technology Centre of Research Excellence.

Professor John Windsor obtained his BSc in Physiology and Biochemistry from the University of Otago in 1977. He then did his undergraduate medical degree at the University of Auckland graduating in 1982. This was followed by a diploma in Obstetrics in 1984 and an MD in Surgery from the University of Auckland in 1989. He obtained his FRACS from the Royal Australasian College of Surgeons in 1990.

Having completed his training in general surgery, he travelled to Edinburgh, Scotland, and had fellowships in HPB, upper GI surgery, vascular surgery and colorectal surgery. He returned to New Zealand in 1992, specialising in HPB and upper GI surgery. He subsequently set up the first HPB/Upper GI surgery unit in New Zealand in 1994. His primary surgical interests include laparoscopic surgery, pancreatic disease and gastro-oesophageal disease.

Research has been an integral aspect of his career, since completing a doctorate in the area of malnutrition and surgical risk. On return to NZ, he established the Pancreas Research Group that has continued to grow, now being encompassed by the Surgical Research Network which itself has two divisions: the Applied Surgery and Metabolism Laboratory and the Surgical Centre for Outcomes Research and Evaluation. This arrangement promotes translational research, with strong basic scientific and clinical research programmes. These have been successful with over 250 peer-reviewed publications made possible by funding from many sources. The research has been well-received with almost 200 invited talks, including Visiting Professorships to Harvard, Oxford, Karolinska, Singapore, Capetown, Johannesburg and Delhi.

CURRENT RESEARCH

- The role of toxic mesenteric lymph in the promotion of multiple organ failure,
- The investigation of specific mitochondrial therapies to restore cellular bioenergetics,
- The determinants based classification of acute pancreatitis severity,
- The mapping and modulation of gastric electrical activity, and
- The development of medical devices.

SURGICAL EDUCATION

The laparoscopic revolution created significant demands on traditional training methods. To address this, he established the first training facility in NZ, the Surgical Skills Centre in 1993. By 2007, a purpose-built facility was built at Mercy Hospital, the Advanced Clinical Skills Centre, which provides multi-disciplinary skills training. The lessons learnt and an awareness of limitation current simulation training resulted in the development of 'integrated cognitive simulation' and the founding of Go Virtual Medical Ltd. After graduating from the IceHouse business incubator, the company was rebranded SIMTICS Ltd, and has grown to have a global reach. John is a board director and educational advisor.

In the Royal Australasian College of Surgeons, he has helped introduce new courses, including the Critical Literature Evaluation and Research, Surgeons as Teachers and Developing a Career in Academic Surgery. He has recently completed a 5-year term as Chairperson of the Section of Academic Surgery and was a Foundation Member of the Academy of Surgical Educators.

RECENT APPOINTMENTS

- Secretary General, International HPB Association (2008-2011)
- Council Member, International Pancreas Association (2006-2012)
- Chairman, Section of Academic Surgery, RACS (2007-2012)
- Convenor, RACS Annual Scientific Congress (2013)
- Chairperson of the National HPB/Upper GI Tumour Stream (2013)

SELECTED MEMBERSHIPS

- Honorary Fellow of the American Surgical Association (2012)
- Honorary Member of the James IV Association of Surgeons (2013)

EDITORSHIPS

- Associate Editor, World Journal of Surgery
- Associate Editor, Pancreatology
- Editorial Board, British Journal of Surgery
- Editorial Board, ANZ Journal of Surgery
- International Advisory Board, Schwartz Textbook of Surgery

SELECTED AWARDS

- Sir Louis Barnett Prize, RACS (1987)
- Chiene Medal, School of Surgery, University of Edinburgh (1992)
- Butland Distinguished Medical Sciences Award (1997)
- Distinguished Teaching Award, University of Auckland (1998)
- Sir Gordon Bell Memorial Lecturer, RACS (2008)
- Butland Award for Excellence in Research Supervision, UOA (2009)
- Ramsey Healthcare Distinguished Visitor in Education, RACS (2009)
- Tertiary Teaching Excellence Award (Innovation), UOA (2009)
- Lucknow Orator, Indian Association of Surgical Gastroenterology (2010)
- British Journal of Surgery Distinguished Lecturer, RACS (2011)
- Michael and Janie Miller Visiting Professor, Johannesburg (2012)
- Jepson Lecturer, Surgical Research Society of Australasia (2012)
- Gluckman Medal for distinguished contribution to research, UOA (2012)
- Trans-Tasman Lecturer, Australasian Gastroenterology Week (2013)

Programme At A Glance

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Saturday</th><th>24th August 2014
Sunday</th></tr>
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(1, 2 & 3)</td><td>Meet-the-Expert Breakfast Sessions
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Dyspepsia / GERD</td><td>Case Discussion</td><td rowspan="9">(0840 – 1615)
36th ECCO Educational Workshop
• Acute severe colitis
• Fistulizing disease
• Management of treatment refractory moderate UC
• Management of infectious complications in IBD
• Imaging and new diagnostic steps in CD
• Recurrent complicated ileocaecal CD</td></tr>
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Lunch Satellite Symposium
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<tr><td>1430 – 1550</td><td>Case Discussion</td><td rowspan="2">Symposium 3
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Daily Programme

Day 1 • 22nd August 2014, Friday

0730 – 0830 Registration

0830 – 0950 *SYMPOSIUM 1* — *Sabah Room*

Dyspepsia / GERD

Chairpersons: Rosaida Md Said / Raman Muthukaruppan

- Non-*H. pylori* gut infection – Evidence for its role in FD [pg26]
  Alexander Ford
- Acid pocket and a disrupted gastro-oesophageal junction in GORD [pg27]
  Lee Yeong Yeh
- Understanding the clinical implications of FD/NERD and FD/IBS overlap [pg27]
  Nimish Vakil

0950 – 1030 *LECTURE 1 – 14TH MSGH ORATION* — *Sabah Room*

Chairperson: Raja Affendi Raja Ali

Insights into optimal management of end stage liver disease - A continuing challenge [pg28]
Patrick Kamath

Citation by: Sanjiv Mahadeva

1030 – 1100 Tea

1100 – 1200 **Best Paper Award Presentations** — *Sabah Room*

Chairpersons: Tan Huck Joo / Mohd Akhtar Qureshi

1200 – 1300 **Lunch Satellite Symposium** *[Takeda]* — *Sabah Room*

Chairperson: Goh Khean Lee

Dexlansoprazole: A NEW approach in acid suppression for GERD management
David A Peura

1300 – 1430 Lunch — *Sarawak Room*

Friday Prayers

1430 – 1550 **Case Discussion** — *Sabah Room*

Moderator: Hamizah Razlan
Chairperson: Sanjiv Mahadeva

Viral Hepatitis
Panel: Nancy Leung / Grace Wong / Michael Manns

1550 – 1630 *LECTURE 2* — *Sabah Room*

Chairpersons: Chan Weng Kai / Ahmad Shukri Md Salleh

The latest in HCV therapies
Michael Manns

1630 – 1745 **Tea Satellite Symposium 1** *[Abbvie]* — *Sabah Room*

Chairperson: Goh Khean Lee

Race towards cure
Michael Manns

2000 – 2200 **Faculty Dinner** (By invitation only) — *The Terrace, Lemon Garden, Shangri-La Hotel, Kuala Lumpur*

Daily Programme

Day 2 • 23rd August 2014, Saturday

0730 – 0830 — **Meet-the-Expert Breakfast Sessions** *(Concurrent)*

1. Key points in the management of acute pancreatitis — *Kedah Room*
   John A Windsor
   Moderator: Razman Jarmin
2. Gastroenterological issues in intensive care unit — *Selangor 1 Room*
   Patrick Kamath
   Moderator: Haniza Omar
3. Making sense of new drugs and treatment approaches to Hepatitis C — *Perak Room*
   Michael Manns
   Moderator: Tee Hoi Poh

0830 – 0950 — **Case Discussion** — *Sabah Room*

Moderator: Tan Soek Siam
Chairpersons: Yoong Boon Koon / Manisekar Subramaniam

Liver Cancer / Liver Failure
Panel: Patrick Kamath / Nancy Leung / Grace Wong / Azah Alias / Salmi Abdullah

0950 – 1030 — *LECTURE 3 – 11TH PANIR CHELVAM MEMORIAL LECTURE* — *Sabah Room*

Chairperson: Ramesh Gurunathan

Progress with acute pancreatitis - Millstones and milestones [pg29]
John A Windsor

Citation by: Mohd Akhtar Qureshi

1030 – 1100 — Tea

1100 – 1220 — *SYMPOSIUM 2* — *Sabah Room*

Fatty Liver

Chairpersons: Muhammad Radzi Abu Hassan / Rosemi Salleh

- Predicting disease progression and mortality in NAFLD [pg30]
  Chan Wah Kheong
- Non-alcoholic Fatty Liver Disease – New challenges [pg31]
  Janaka de Silva
- Designing therapeutic approaches to treatment of fatty liver [pg32]
  Grace Wong

1220 – 1420 — **Lunch Satellite Symposium** *[AstraZeneca]* — *Sabah Room*

Chairperson: Tan Huck Joo

Refractory GERD – Diagnosis and treatment
Nimish Vakil

Daily Programme

Day 2 • 23rd August 2014, Saturday

1430 – 1610	*SYMPOSIUM 3* **Managing Chronic Pancreatitis** *Chairpersons: P Kandasami / Jayaram Menon* • Nutrition and malabsorption *[pg33]* *Nam Quoc Nguyen* • Endoscopic options for managing chronic pancreatitis *[pg33]* *Jong Ho Moon* • Surgery for complications of chronic pancreatitis *[pg34]* *Adarsh Chaudhary*	*Sabah Room*
1610 – 1730	**Tea Satellite Symposium** *[Novartis]* *Chairperson: Goh Khean Lee* Do you have the right medication for the right patient? *Nancy Leung*	*Sabah Room*
1730 – 1930	MSGH Annual General Meeting	*Selangor 1 Room*

Day 3 • 24th August 2014, Sunday

0730 – 0830	**Meet-the-Expert Breakfast Sessions** *(Concurrent)* 4. Non-invasive test of liver fibrosis *Grace Wong* *Moderator: Nerenthran Loganathan*	*Sarawak Room*
	5. Rational approach to the long term treatment of chronic Hepatitis B *Nancy Leung* *Moderator: Maylene Kok*	*Selangor 1 Room*

36th ECCO Educational Workshop

24th August 2014, Sunday

0840 – 0900	Welcome *Sanjiv Mahadeva* Introduction to ECCO *Larry Egan*	
0900 – 1230	*SESSION I – ECCO CONSENSUS* *Chairpersons: Goh Khean Lee / Mohd Akhtar Qureshi*	*Sabah Room*
0900 – 0945	Case 1 • Acute severe colitis *Muhammad Radzi Abu Hassan*	
0945 – 1030	Case 2 • Fistulizing disease *Shanthi Palaniappan*	
1030 – 1100	Coffee	
1100 – 1145	Case 3 • Management of treatment refractory moderate UC *Ida Normiha Hilmi*	
1145 – 1230	Case 4 • Management of infectious complications in IBD *Stephan Vavricka*	
1230 – 1330	Lunch	
1330 – 1645	*SESSION II – ECCO CONSENSUS* *Chairpersons: Tan Huck Joo / Raja Affendi Raja Ali*	*Sabah Room*
1330 – 1415	Case 5 • Imaging and new diagnostic steps in CD *Stephan Vavricka*	
1415 – 1500	Case 6 • Recurrent complicated ileocaecal CD *Larry Egan*	
1500 – 1515	Coffee	
1515 – 1600	State-of-the-art lecture: Opportunistic infections in IBD *Larry Egan*	
1600 – 1615	Summary and Farewell *Raja Affendi Raja Ali*	

Moderators / Chairpersons

Ahmad Shukri Md Salleh
Hospital Sultanah Nur Zahirah, Kuala Terengganu Terengganu

Chan Weng Kai
Hospital Sultanah Aminah, Johor Bahru, Johor, Malaysia

Goh Khean Lee
University Malaya Medical Centre, Kuala Lumpur

Hamizah Razlan
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur

Haniza Omar
Hospital Selayang, Batu Caves, Selangor

Jayaram Menon
Hospital Queen Elizabeth, Kota Kinabalu, Sabah

P Kandasami
International Medical University, Kuala Lumpur

Maylene Kok
Sarawak General Hospital, Kuching, Sarawak, Malaysia

Manisekar Subramaniam
Hospital Sultanah Bahiyah, Alor Setar, Kedah, Malaysia

Mohd Akhtar Qureshi
Sunway Medical Centre, Petaling Jaya, Selangor

Muhammad Radzi Abu Hassan
Hospital Sultanah Bahiyah, Alor Setar, Kedah, Malaysia

Nerenthran Loganathan
Queen Elizabeth Hospital, Kota Kinabalu, Sabah, Malaysia

Raja Affendi Raja Ali
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur

Raman Muthukaruppan
Hospital Queen Elizabeth, Kota Kinabalu, Sabah

Ramesh Gurunathan
Sunway Medical Centre, Petaling Jaya, Selangor

Razman Jarmin
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia

Rosaida Md Said
Hospital Ampang, Ampang, Selangor

Rosemi Salleh
Hospital Raja Perempuan Zainab II, Kota Bharu, Kelantan

Sanjiv Mahadeva
University Malaya Medical Centre, Kuala Lumpur

Tan Huck Joo
Sunway Medical Centre, Petaling Jaya, Selangor

Tan Soek Siam
Hospital Selayang, Batu Caves, Selangor

Tee Hoi Poh
Hospital Tengku Ampuan Afzan, Kuantan, Pahang

Yoong Boon Koon
University Malaya Medical Centre, Kuala Lumpur

Faculty Bio-Data

CHAN WAH KHEONG

Dr Chan is Associate Professor of Medicine at the University of Malaya and Consultant Physician and Gastroenterologist at the University Malaya Medical Centre. He graduated with distinction from the University of Malaya in 2005, and obtained the Membership of the Royal Colleges of Physicians of the United Kingdom in 2008. He served at the Kuala Lumpur General Hospital at the beginning of his career and subsequently returned to his alma mater where he actively contributed to clinical, research and educational work. An expert in gastrointestinal and liver diseases, he has published numerous papers in peer-reviewed journals and presented in both local and international conferences. His areas of interest are diagnostic and therapeutic endoscopy, viral hepatitis B and C, hepatocellular carcinoma and non-alcoholic fatty liver disease.

ADARSH CHAUDHARY

Dr Chaudhary is currently Chairman of Department of GI Surgery, GI Oncology and Bariatric Surgery, Medanta Medicity Hospital, Gurgaon, India. He was President of Indian Association of Surgical Gastroenterology in 2010-2011, and Past Secretary of Indian Society of Gastroenterology. Dr Chaudhary graduated from H P Medical College, Himachal Pradesh University and trained at the Postgraduate Institute of Medical Education and Research, Chandigarh, India. Before his current appointment, he was Professor and Head of Gastrointestinal Surgery, Gobind Ballabh Pant Hospital, University of Delhi, before he was appointed Senior Consultant and Co-Chairman at Sir Ganga Ram Hospital for 6 years. Dr Chaudhary has 137 publications and has contributed 42 book chapters.

JANAKA DE SILVA

Professor Dr de Silva is Professor of Medicine at the University of Kelaniya, Sri Lanka. He is also Director of the Postgraduate Institute of Medicine, University of Colombo and Chairman of the National Research Council of Sri Lanka. He was educated at the prestigious Royal College Colombo. After obtaining his postgraduate Doctor of Medicine, he trained at Oxford University, obtaining Doctor of Philosophy under Professor Dr Derek Jewel. He was Dean of Medicine at the University of Kelaniya for nine years. He is Past President of both the Ceylon College of Physicians and the Gastroenterology Society of Sri Lanka. He has co-authored over 200 peer-reviewed publications, and his research interests include NAFLD and IBD.

LAURENCE EGAN

Professor Dr Egan graduated from National University of Ireland (NUI) in 1990. He completed further training in Internal Medicine, Clinical Pharmacology & Gastroenterology, receiving American Board certification in those three disciplines at the Mayo Clinic in Minnesota and NUI Galway also conferred an MD in 1999. Professor Dr Egan then undertook post-doctoral training from 2000 to 2002, in the Laboratory of Mucosal Immunology at the University of California, San Diego, before returning to the Mayo Clinic to take up a consultancy in Gastroenterology, with joint appointment in the Department of Molecular Pharmacology and Experimental Therapeutics. His research focuses on molecular characterisation of signalling pathways involved in intestinal epithelial cell stress, death and malignant transformation. In 2005, Professor Dr Egan was recruited by NUI Galway and the Health Service Executive Western Region as Professor of Clinical Pharmacology/Consultant Clinical Pharmacologist and Head of the Department of Pharmacology & Therapeutics, as well as Consultant Gastroenterologist at the Galway University Hospital (GUH), Ireland. Professor Dr Egan is also one of the principal investigators at the Health Research Board, Clinical Research Facility at the NUI. He has established the IBD clinic at the GUH that provide focused care to IBD patients in a multi-disciplinary environment. Prof Egan is actively involved with the educational activity at the European Crohn Colitis Organisation (ECCO) and currently serves as Editor-in-Chief for the Journal of Crohn's and Colitis (JCC), the top 20 gastroenterology and hepatology journals and also a board member for the GUT editorial board.

ALEXANDER FORD

Dr Alex Ford is an Associate Professor and Honorary Consultant Gastroenterologist at St James's University Hospital, Leeds. He qualified from the University of Leeds in 1997. During his registrar training, he conducted a two-year period of research funded by the Medical Research Council, obtaining an MD from Leeds University. He spent a year in the Gastroenterology Division of McMaster University Medical Centre, Hamilton, Ontario, Canada, under Professor Dr Moayyedi and Richard Hunt. Dr Ford is an expert in systematic review and meta-analysis and has published extensively in this area. He is an Associate Editor for Alimentary Pharmacology and Therapeutics, and a member of the international editorial boards of both Alimentary Pharmacology and Therapeutics, The American Journal of Gastroenterology, and Clinical Gastroenterology and Hepatology.

Faculty Bio-Data *(cont'd)*

PATRICK KAMATH

Professor Dr Kamath is currently Professor of Medicine and Consultant Gastroenterologist and Hepatologist at the Mayo Clinic, Rochester, USA. He is the Henry J Plummer Distinguished Physician of the Department of Medicine and a Distinguished Educator of the Mayo Foundation. He is in the Teacher of the Year Hall of Fame. He graduated from St John's Medical College, Bangalore University. He then trained at the Postgraduate Institute of Medical Education and Research before continuing his Fellowship training at the Mayo Clinic. Dr Kamath has been Associate Editor of Clinical Gastroenterology and Hepatology; and currently is Associate Editor of Journal of Hepatology. He was instrumental in developing the MELD score. His special interest is in portal hypertension, hepatic encephalopathy and variceal bleed. He has published more than 270 peer-reviewed articles.

LEE YEONG YEH

Dr Lee is Consultant Gastroenterologist and Physician at the Department of Medicine, Universiti Sains Malaysia. He graduated from USM in 2000, and received his postgraduate training at the same hospital, obtaining MRCP and MMed. After his gastroenterology fellowship, he completed his PhD at University of Glasgow in 2013. He then, did his postdoctoral fellowship in the United States in Neurogastroenterology and motility. He sits on the editorial board of BMC Gastroenterology and Journal of Royal College of Physicians of Edinburgh. He is also a Fellow of American College of Gastroenterology and American College of Physicians, and Royal College of Physicians. He has published almost 60 peer-reviewed articles in leading journals including Gastroenterology and Gut, his major interests lie in gastroesophageal reflux disease, *helicobacter pylori* and functional gastrointestinal disorders.

NANCY LEUNG

Dr Leung graduated from University College Hospital Medical School, London, United Kingdom in 1976. She received her medical training at St James Hospital, the Middlesex Hospital, Royal Northern Hospital and University College Hospital, London, United Kingdom, between 1978-82, as Senior House Officer and Registrar. In 1982, she joined the Clinical Research Center as Research Clinician and Honorary Senior Registrar at Northwick Park Hospital, Middlesex, United Kingdom. She then returned to Hong Kong to join Department of Medicine, The Chinese University of Hong Kong. Dr Leung is the Founding Chairperson of ASIAHEP. From 2003-2011, she was a Consultant Physician and Coordinator of Clinical Services at Alice Ho Miu Ling Nethersole Hospital. Dr Leung's research interests include clinical management of viral hepatitis and related complications. She participated in over 20 international multicenter clinical trials as a Principal Investigator and has over 125 publications in internationally recognised journals.

MICHAEL MANNS

Professor Dr Manns is Director of Department of Gastroenterology, Hepatology and Endocrinology at the Medical School of Hannover in Germany. Professor Dr Manns attended medical schools at the University of Vienna in Austria and the University of Mainz in Germany. He received his postgraduate training at the Free University of Berlin in Germany and the University of Mainz, where he became Professor of Medicine in 1986. Professor Dr Manns was a Research Associate at the Scripps Research Institute in La Jolla, California, US, from 1987 to 1988. He has a long-term research interest in liver diseases, with a main focus on viral hepatitis, autoimmune liver diseases, hepatocellular carcinoma, liver transplantation, regenerative medicine, and cell therapy. He is Founder and Chairman of Hep-Net, a national network of competence on viral hepatitis, and the German Liver Foundation. He was President of the German Society of Gastroenterology in 2006, President of the German Association for the Study of the Liver (GASL) in 2013, the German Society of Internal Medicine for 2013/4, and is President Elect of United European Gastroenterology (UEG). Professor Dr Manns has received numerous awards, including the International Hans Popper Award in 1995, and the European Association for the Study of the Liver (EASL) Recognition Award in 2007.

JONG-HO MOON

Professor Dr Moon is currently Professor of Medicine, Chief of Division of Gastroenterology, Director of Digestive Disease Centre at the Soon Chun Hyang University School of Medicine, Bucheon, Seoul, Korea. Professor Dr Moon specialises in pancreatobiliary endoscopy and was the first to introduce peroral cholangioscopy for the diagnosis and treatment of biliary diseases. He is also an expert in endoscopic stenting and endoscopic ultrasound. Dr Moon has published more than 100 articles in leading journals including Gastroenterology.

Faculty Bio-Data *(cont'd)*

NAM QUOC NGUYEN

Dr Nguyen is Senior Consultant and Interventional Gastroenterologist at the Royal Adelaide Hospital, and an Associate Professor at the Discipline of Medicine, University of Adelaide. He spent two dedicated years of fellowship in the United States to train in advanced endoscopy, EUS and management of hepatobiliary disorders. Dr Nguyen graduated with First class honours from University of Adelaide in 1998, followed by a PhD on nutritional support in critically-ill patients, in 2008. His research interests are gut function and nutrition, basic and clinical research on pancreatic cancer, novel endoscopic approaches for treatment of obesity and esophageal function testing.

NIMISH VAKIL

Professor Dr Vakil is Professor of Medicine at the University of Wisconsin School of Medicine and Public Health in Madison. He also serves as associate editor of the American Journal of Gastroenterology for ten years from 2002-2013, and is US editor of Endoscopy, Journal of the European Society of Gastrointestinal Endoscopy. Dr Vakil is the author of more than 250 papers in the leading journals. He has chaired the Practice parameters committee of the American College of Gastroenterology and has served on the publications committee of the American College of Gastroenterology and the Research committee of the American Society for Gastrointestinal Endoscopy. He serves on the editorial board of a number of journals including Alimentary Pharmacology and Therapeutics, Evidence-based Gastroenterology and Digestive and Liver Diseases. Dr Vakil has received a number of awards including the Blaine Brower fellowship of the American College of Physicians, the research prize of the European *H. pylori* study group and an alumnus award from Northwestern University. His research interests include GERD, *H. pylori* infection, dyspepsia and consensus development.

STEPHAN VAVRICKA

Dr Stephan Vavricka is currently the Head of the Division of Gastroenterology and Hepatology, Triemli Hospital, Zurich, Switzerland. He holds several distinguished research grants from the Swiss National Science Foundation and the Roche Research Foundation focusing on the research in inflammatory bowel disease (IBD). Prior to that, he underwent the fellowship training in IBD at the Division of Gastroenterology, University Hospital Zurich, Switzerland, and The Martin Boyer Laboratories, University of Chicago, IBD Research Center, USA. He is also one of the investigators and project leader of the Swiss IBD Cohort Study (SIBDCS) that is designed for optimal integration of multi-disciplinary collaborations, by harvesting information about epidemiological, environmental, immunological, genetic, clinical and psycho-social factors, as well as the outcome of disease and economical information on medical and social resource utilisation. Among the unique features of SIBDCS, includes a broad base collaborative network both in private and public GI practices and centres. Dr Stephan Vavricka has published more than 150 peer-reviewed articles focusing in IBD and an editor for the Digestion, an international Journal of Gastroenterology. He is an active member for educational committee (EduCom) of the European Crohns Colitis Organisation (ECCO), focusing on the strengthening evidence-based knowledge about IBD in all member countries of ECCO and beyond, including provision of IBD educational and intensive advanced workshops.

JOHN A WINDSOR

Professor Dr Windsor is Director of Surgical Research at the Department of Surgery, University of Auckland, Auckland City Hospital, New Zealand. He is an Upper GI surgeon with a special interest in pancreatology. He is Director of the Surgical Research Network, incorporating the Applied Surgery and Metabolism Laboratory and the Surgical Centre for Outcomes Research and Evaluation. He is also the Founding Director of SIMTICS Ltd and Associate Director of the National Medical Technology Centre of Research Excellence. Professor Dr Windsor runs an active research programme focussing on the pathophysiology and management of acute pancreatitis. He graduated from Auckland University and underwent his postgraduate training at the Royal Infirmary Edinburgh under the guidance of Sir David Carter. Professor Dr Windsor has published extensively on pancreatic related topics, among others.

GRACE WONG LAI HUNG

Professor Dr Wong is Associate Professor of the Division of Gastroenterology and Hepatology, Department of Medicine and Therapeutics, The Chinese University of Hong Kong. In 2010, she received her Doctorial Degree of Medicine from The Chinese University of Hong Kong. She has published over 125 articles in peer-reviewed journals including Gastroenterology, Hepatology and Gut. She has been awarded Young Investigator Award of the Asian Pacific Association for the Study of the Liver in 2009, and the Distinguished Research Paper Award for Young Investigators of the Hong Kong College of Physicians, in 2010 and 2013. Her area of expertise is hepatitis and fatty liver.

MSGH ANNUAL SCIENTIFIC MEETINGS AND ENDOSCOPY WORKSHOPS

The proud tradition of the

Malaysian Society of Gastroenterology and Hepatology

Annual Therapeutic Endoscopy Workshops – "Endoscopy"

(Organised by the Malaysian Society of Gastroenterology and Hepatology in collaboration with the University of Malaya)

EVENT	FACULTY	DATE
Difficult ERCP- "The Master's Approach"	Kees Huibregtse (Amsterdam, The Netherlands)	19th August 1993
Endoscopic Ultrasonography	TL Tio (Washington, USA)	26th July 1994
ERCP- "Basic Skills, Finer Points and New Techniques"	Kees Huibregtse (Amsterdam, The Netherlands)	25th August 1994
Practical Points in Therapeutic Endoscopy	Nib Soehendra (Hamburg, Germany)	6th December 1994
Therapeutic Endoscopy Workshop (In conjunction with Island Hospital, Penang, Malaysia)	Nib Soehendra (Hamburg, Germany) Kees Huibregtse (Amsterdam, Netherlands)	22nd July 1997
Lasers in Gastroenterology	R Leicester (London, United Kingdom)	13th August 1997
GI Endoscopy Nurses Workshop – "Setting the Standards for Practice"	Staff Members - Endoscopy Unit, University Hospital, Kuala Lumpur, Malaysia	30th April - 2nd May 1999
Endoscopy 2000	Sydney C S Chung (Hong Kong, China), Kenji Yasuda (Kyoto, Japan), Wang Yong-Guang (Beijing, China), Nageshwar Reddy (Hyderabad, India) *GIA Faculty:* Dorothy Wong (Hong Kong, China)	13th - 15th April 2000
Endoscopy 2001 – "A Master Class in Therapeutic Endoscopy"	Nib Soehendra (Hamburg, Germany) *GIA Faculty:* Adriana Cargin (Melbourne, Australia)	14th - 15th April 2001
Endoscopy 2002 – "Enhancing Basic Skills and Developing Expertise"	Christopher Williams (London, United Kingdom), Naotaka Fujita (Sendai, Japan), Joseph Leung (Sacramento, USA), Kees Huibregtse (Amsterdam, Netherlands) *GIA Faculty:* Diana Jones (Sydney, Australia)	5th - 7th April 2002
Endoscopy 2003 – "The Cutting Edge of GI Endoscopy"	Douglas Howell (Portland, USA), Haruhiro Inoue (Tokyo, Japan) Simon K Lo (Los Angeles, USA), Nageshwar Reddy (Hyderabad, India)	28th February - 2nd March 2003
Endoscopy 2004 – "Appreciating the Art of GI Endoscopy"	Firas Al Kawas (Washington, USA), Yoshihiro Sakai (Tokyo, Japan), Stefan Seewald (Hamburg, Germany), Joseph Sung (Hong Kong, China)	5th - 7th March 2005
Endoscopy 2005 – "Defining the Scope of Excellence"	Guido Costamagna (Rome, Italy), Shim Chan-Sup (Seoul, South Korea), K Yasuda (Kyoto, Japan), B Rembacken (Leeds, United Kingdom)	1st - 3rd April 2005
Endoscopy 2006 – "Frontiers of Therapeutic Endoscopy"	A T R Axon (Leeds, United Kingdom), James Lau (Hong Kong, China), Seo Dong-Wan (Seoul, Korea), Irving Waxman (Chicago, USA), Naohisa Yahagi (Tokyo, Japan)	14th - 16th April 2006
Endoscopy 2007 – "The Best Endoscopic Practices	Nageshwar Reddy (Hyderabad, India), Reza Shaker (Milwaukee, USA), Yusuke Saitoh (Sapporo, Japan), Stefan Seewald (Hamburg, Germany), Song Si-Young (Seoul, Korea), Mary Bong (Sydney, Australia)	13th - 15th April 2007
Endoscopy 2008 – "Seeing Better, Doing Better"	Peter B Cotton (Charleston, USA), G Ginsberg (Philadelphia, USA), H Isayama (Tokyo, Japan), S Ryozawa, (Yamaguchi, Japan), J S Byeon (Seoul, Korea), Syed Shah, (West Yorkshire, United Kingdom)	29th February, 1st - 2nd March 2008
Endoscopy 2009 – "Exploring the Limits of Endoscopy"	Jerome D Waye (New York, USA), Kulwinder Dua (Milwaukee, USA), Amit Maydeo (Mumbai, India), H Kawamoto (Okayama, Japan), I Yasuda (Gifu, Japan), Lee Yong-Chan (Seoul, Korea), Y Sano (Kobe, Japan)	20th - 22nd March 2009

Annual Therapeutic Endoscopy Workshops – "Endoscopy" (cont'd)

EVENT	FACULTY	DATE
Endoscopy 2010 (organised with the APDW 2010) (In conjunction with Selayang Hospital, Kuala Lumpur, Malaysia)	Michael Bourke (Sydney, Australia), David Carr-Locke (New York, USA), Mitsuhiro Fujishiro (Tokyo, Japan), Marc Giovannini (Marseilles-France), Takuji Gotoda (Tokyo, Japan), James Lau (Hong Kong, China), Amit Maydeo (Mumbai, India), Ibrahim Mostafa (Cairo, Egypt), Horst Neuhaus (Düsseldorf, Germany), Nageshwar Reddy (Hyderabad, India), Rungsun Reknimitr (Bangkok, Thailand), Seo Dong-Wan (Seoul, Korea), Naohisa Yahagi (Tokyo, Japan), Hironori Yamamoto (Tokyo, Japan), Kenjiro Yasuda (Kyoto, Japan)	20th and 21st September 2010
Endoscopy 2011 – "What's New and What's Good for Our Patients"	Hisao Tajiri (Tokyo, Japan), Chiu Han-Mo (Taipei, Taiwan), Arthur Kaffes (Sydney, Australia), Ho Khek-Yu (Singapore), Hiroo Imazu (Tokyo, Japan), Takao Itoi (Tokyo, Japan), Lee Dong-Ki (Seoul, Korea), Takahisa Matsuda (Tokyo, Japan), Moon Jong-Ho (Seoul, Korea)	14th - 17th April 2011
Endoscopy 2012 – "Therapeutic Endoscopy in the Global World"	Robert Hawes (Miami, USA), Hiroshi Kashida (Kinki, Japan), Lee Sang-Hyup (Seoul, Korea), Claudio Navarette (Santiago, Chile), Paulo Sakai (Sao Paulo, Brazil), Rajvinder Singh (Adelaide, Australia), Wang Hsiu-Po (Taipei, Taiwan), Kenshi Yao (Fukuoka, Japan)	30th - 31st March, 1st April 2012
Endoscopy 2013 – "Advancing the Practice of Endoscopy"	Phillip Chiu (Hong Kong, China), Lawrence Khek-Yu Ho (Singapore), Horst Neuhaus (Dusseldorf, Germany), Krish Ragunath (Nottingham, United Kingdom), Dong-Wan Seo (Seoul, Korea), Yun-Sheng Yang (Beijing, China), Ian Yusoff (Perth, Australia) *Special GIA Faculty:* Wang Ping (Shanghai, China)	12th - 14th April 2013
Endoscopy 2014 – "The Best Tips in Therapeutic Endoscopy"	Mitsuhiro Kida (Kanagawa, Japan), Gregory Ginsberg (Philadelphia, USA), Yutaka Saito (Tokyo, Japan), Jin Hong Kim (Suwon, Korea), James Y W Lau (Shatin, Hong Kong), *Special GIA Faculty:* Mary Bong (Sydney, Australia)	28th - 30th March 2014

Distinguished Endoscopy Lecturers

NO	YEAR	ORATOR	TOPIC
1st	1999	Kees Huibregtse (Amsterdam, The Netherlands)	The Development and Use of Biliary Endoprosthesis in ERCPs
2nd	2001	Nib Soehendra (Hamburg, Germany)	A Master's Approach to Therapeutic Endoscopy
3rd	2002	Christopher Williams (London, United Kingdom)	Practical Tips and Pitfalls in Colonoscopy
4th	2003	Guido N J Tytgat (Amsterdam, The Netherlands)	The Unlimited Horizons of Therapeutic Endoscopy
5th	2004	Yoshio Sakai (Tokyo, Japan)	Development and Application of Colonoscopy
6th	2005	Guido Costamagna (Rome, Italy)	Endoscopic Management of Pancreatobiliary Diseases – State-of-the-art in 2005
7th	2006	Anthony T R Axon (Leeds, United Kingdom)	The Impact of New Technology in GI Endoscopy
8th	2007	D Nageshwar Reddy (Hyderabad, India)	Chronic Pancreatitis – Genes to Bedside
9th	2008	Peter Cotton (Charleston, USA)	Therapeutic Endoscopy – Then, Now and Maybe
10th	2009	Jerome Waye (New York, USA)	Exploring the Limits of Endoscopy
11th	2010	David L Carr-Locke (New York, USA)	Enhancing the Eye – The Future of Endoscopy
12th	2011	Hisao Tajiri (Tokyo, Japan)	Enhanced Imaging of the Gastrointestinal Tract
13th	2012	Robert Hawes (Orlando, USA)	The Current and Future Role of Endoscopic Ultrasonography in GI Practice
14th	2013	Horst Neuhaus (Dusseldorf, Germany)	Viewing the Bile Duct – Recent Developments of Cholangioscopy
15th	2014	Gregory Ginsberg (Philadelphia, USA)	Future Prospects for Gastrointestinal Endoscopy

Annual Scientific Meetings – GUT (Overseas Invited Faculty)

The Stomach '96 (Co-organised with the College of Surgeons)
3rd – 6th July 1996, Kuala Lumpur

Stephen G Bown	United Kingdom	Kang Jin-Yong	United Kingdom	Henry M Sue-Ling	United Kingdom
Sydney C S Chung	Hong Kong	Lam Shiu-Kum	Hong Kong	Nicholas J Talley	Australia
Teruyuki Hirota	Japan	Adrian Lee	Australia	Guido N J Tytgat	Netherlands
Richard H Hunt	Canada	Roy E Pounder	United Kingdom	Cornelis J H Van De Velde	Netherlands
David Johnston	United Kingdom	Robert H Riddell	Canada		

Penang International Teaching Course in Gastroenterology
(Co-organised with Penang Medical Practitioners' Society with the participation of the British Society of Gastroenterology)
23rd – 26th July 1997, Penang

Anthony Axon	United Kingdom	Dermot Kelleher	Ireland	J J Misiewicz	United Kingdom
John Dent	Australia	Fumio Konishi	Japan	James Neuberger	United Kingdom
R Hermon Dowling	United Kingdom	John Lambert	Australia	Thierry Poynard	France
Greg Holdstock	United Kingdom	Michael Larvin	United Kingdom	Jonathan Rhodes	United Kingdom
Kees Huibregtse	Netherlands	Christopher Liddle	Australia	Nib Soehendra	Germany
P W N Keeling	Ireland	Lim Seng-Gee	Singapore		

Second Western Pacific Helicobacter Congress
25th – 27th July 1998, Kota Kinabalu, Sabah

Masahiro Asaka	Japan	Richard Hunt	Canada	Pentti Sipponen	Finland
Douglas E Berg	USA	Lam Shiu-Kum	Hong Kong, China	Joseph J Y Sung	Hong Kong, China
Fock Kwong-Ming	Singapore	Adrian Lee	Australia	Rakesh Tandon	India
David Forman	United Kingdom	Peter Malfertheiner	Germany	Guido N J Tytgat	Netherlands
David Y Graham	USA	Kenneth E L McColl	Scotland	Xiao Shu-Dong	China
Stuart L Hazell	Australia	Hazel M Mitchell	Australia		

Gastroenterology 1999
23rd – 25th July 1999, Kuala Terengganu, Terengganu

Francis K L Chan	Hong Kong, China	Mohammed Al Karawi	Saudi Arabia	Quak Seng-Hock	Singapore
Sydney S C Chung	Hong Kong, China	Mohammad Sultan Khuroo	Saudi Arabia	Nicholas J Talley	Australia
John Dent	Australia	Peter Malfertheiner	Germany	Neville D Yeomans	Australia
Rikiya Fujita	Japan	Colm O'Morain	Ireland		

GUT 2000
24th – 26th August 2000, Melaka

Anthony Axon	United Kingdom	Lim Seng-Gee	Singapore	Francis Seow-Choen	Singapore
Geoffrey C Farrell	Australia	Anthony I Morris	United Kingdom	Jose D Sollano	Philippines
Vay Liang W Go	USA	David Mutimer	United Kingdom	Guido N J Tytgat	Netherlands
Humphrey J F Hodgson	United Kingdom	Ng Han-Seong	Singapore	Michael Wolfe	USA
Peter Katelaris	Australia	Thierry Poynard	France		

Gastro 2001 (With the participation of the American Gastroenterological Association)
5th – 8th April 2001, Kota Kinabalu, Sabah

Aziz Rani	Indonesia	Y K Joshi	India	Mahesh P Sharma	India
Chung Owyang	USA	Joseph Kolars	USA	Gurkirpal Singh	USA
Sydney S C Chung	Hong Kong, China	Koo Wen-Hsin	Singapore	Jose D Sollano	Philippines
Andrew Clouston	Australia	Edward Krawitt	USA	J L Sweeney	Australia
John Dent	Australia	Pinit Kullavanijaya	Thailand	Rakesh Tandon	India
Fock Kwong-Ming	Singapore	Lam Shiu-Kum	Hong Kong, China	Benjamin C Y Wong	Hong Kong, China
Robert N Gibson	Australia	Peter Malfertheiner	Germany	Xiao Shu-Dong	PR China
Richard Hunt	Canada	James M Scheiman	USA		

Annual Scientific Meetings – GUT (Overseas Invited Faculty) (cont'd)

GUT 2002
27th – 30th June 2002, Penang

Chow Wan-Cheng	Singapore	Peter Katelaris	Australia	Ng Han-Seong	Singapore
Anuchit Chutaputti	Thailand	James Y W Lau	Hong Kong, China	C S Pitchumoni	USA
David Forman	United Kingdom	Tore Lind	Sweden	Herbert J Tilg	Austria
Lawrence Ho Khek-Yu	Singapore	Barry James Marshall	Australia	John Wong	Hong Kong, China

GUT 2003
28th – 31st August 2003, Kuching, Sarawak

Francis K L Chan	Hong Kong, China	Humphrey J O'Connor	Ireland	Eamonn M M Quigley	Ireland
Chang Mei-Hwei	Taiwan	Colm O'Morain	Ireland	Jose D Sollano Jr	Philippines
W G E Cooksley	Australia	Teerha Piratvisuth	Thailand	Joseph Sung	Hong Kong, China
Gwee Kok-Ann	Singapore	Roy Pounder	United Kingdom	Yeoh Khay-Guan	Singapore

GUT 2004
24th – 27th June 2004, Penang

Sydney C S Chung	Hong Kong, China	Huang Jia-Qing	China	Mario Rizzetto	Italy
Geoffrey C Farrell	Australia	Lam Shiu-Kum	Hong Kong, China	Russell W Strong	Australia
Ronnie Fass	USA	Peter W R Lee	United Kingdom	Benjamin C Y Wong	Hong Kong, China
David Fleischer	USA	Masao Omata	Japan		
Fock Kwong-Ming	Singapore	Teerha Piratvisuth	Thailand		

GUT 2005
23rd – 25th June 2005, Pulau Langkawi, Kedah

Raymond Chan Tsz-Tong	Hong Kong, China	Gerald Johannes Holtmann	Australia	Graeme Young	Australia
Meinhard Classen	Germany	Peter Malfertheiner	Germany	Yuen Man-Fung	Hong Kong, China
Anthony Goh	Singapore	Kenneth McColl	Ireland		

GUT 2006
20th – 23rd June 2006, Kuala Lumpur

Peter Gibson	Australia	Anthony Morris	United Kingdom	Francis Seow-Choen	Singapore
Lawrence Ho Khek-Yu	Singapore	Nageshwar Reddy	India	Nimish Vakil	USA
Gerald Johannes Holtmann	Germany	Ng Han-Seong	Singapore	John Wong	Hong Kong, China
Lim Seng-Gee	Singapore	Ooi Choon-Jin	Singapore		
Irvin Modlin	USA	Fred Poordad	USA		

GUT 2007
29th August – 1st September 2007, Kota Kinabalu, Sabah

Ronnie Fass	USA	Norman Marcon	USA	Nib Soehendra	Germany
Marc Giovannini	France	Amit Maydeo	India	Daniel Wong	Singapore
Robert Hawes	USA	Charlie Millson	England	Hironori Yamamoto	Japan
Richard Hunt	Canada	G V Rao	India	Yeoh Khay-Guan	Singapore
Finlay Macrae	Australia	Marcelo Silva	Argentina		

GUT 2008
21st – 24th August 2008, Kuala Lumpur

Anuchit Chutaputti	Thailand	Lawrence Ho Khek-Yu	Singapore	Govind K Makharia	India
Peter Bytzer	Sweden	Pali Hungin	United Kingdom	Prateek Sharma	USA
Henry Chan Lik-Yuen	Hong Kong, China	Rupert Leong	Australia	Rajvinder Singh	Australia
Sydney C S Chung	Hong Kong, China	Davide Lomanto	Singapore	Mitchell Shiffman	USA
David Y Graham	USA	Lui Hock-Foong	Singapore	Sundeep Punamiya	Singapore

GUT 2009

14th to 16th August 2009, Pulau Langkawi, Kedah

Geoffrey Farrell	Australia	Lim Seng-Gee	Singapore	Joseph Sung Jao-Yiu	Hong Kong, China
Fock Kwong-Ming	Singapore	Lo Chung-Mau	Hong Kong, China	Daniel Wong Wai-Yan	United Kingdom
Peter R Galle	Germany	Irvin Modlin	USA	Yeoh Khay-Guan	Singapore
Christopher Khor	Singapore	Fabio Pace	Italy		
George K K Lau	Hong Kong, China	Rungsun Rerknimitr	Thailand		

APDW 2010 (Incorporating GUT 2010 & Endoscopy 2010)

19th to 22nd September 2010, Kuala Lumpur Convention Centre, Kuala Lumpur

Subrat Kumar Acharya	India	Hiroyuki Isayama	Japan	Eamonn Quigley	Ireland
Deepak Amarapurkar	India	Takao Itoi	Japan	Shanmugarajah Rajendra	Australia
Ang Tiing-Leong	Singapore	Derek Jewell	United Kingdom	Gurudu Venkat Rao	India
John Atherton	United Kingdom	Jia Ji-Dong	China	Nageshwar Reddy	India
Anthony Axon	United Kingdom	Utom Kachintorn	Thailand	Rungsun Rerknimitr	Thailand
Deepak Bhasin	India	Hiroshi Kashida	Japan	Jean Francois Rey	France
Henry J Binder	USA	Peter Katelaris	Australia	Shomei Ryozawa	Japan
Mary Bong	Australia	Takashi Kawai	Japan	Yutaka Saito	Japan
Michael Bourke	Australia	Christopher Khor Jen-Lock	Singapore	Shiv Sarin	India
Marco Bruno	The Netherlands	Nayoung Kim	Korea	Wolff Schmiegel	Germany
David Carr-Locke	USA	Seigo Kitano	Japan	Juergen Schoelmerich	Germany
Ashok Chacko	India	Sriram Krishnan	USA	See Teik-Choon	United Kingdom
Henry Chan Lik-Yuen	Hong Kong, China	Shin-ei Kudo	Japan	Seo Dong-Wan	Korea
Francis Chan Ka-Leung	Hong Kong, China	Ashish Kumar	India	Francis Seow-Choen	Singapore
Adarsh Chaudhary	India	George Lau	Hong Kong, China	Prateek Sharma	USA
Yogesh Chawla	India	James Lau Yun-Wong	Hong Kong, China	Shim Chan-Sup	Korea
Yang Chen	USA	Rupert Leong	Australia	Hiroshi Shimada	Japan
Chen Min-Hu	China	Leung Wai-Keung	Hong Kong, China	Jose Sollano	Philippines
Philip Chiu	Hong Kong, China	Lim Seng-Gee	Singapore	Eduard Stange	Germany
Pierce Chow	Singapore	Lin Jaw-Town	Taiwan	Russell W Strong	Australia
Chow Wan-Cheng	Singapore	Liu Chen-Hua	Taiwan	Kentaro Sugano	Japan
Sylvia Crutchet	Chile	Lo Chung-Mau	Hong Kong, China	Kazuki Sumiyama	Japan
J Enrique Dominguez-Muñoz	Spain	Lo Gin-Ho	Taiwan	Joseph Sung	Hong Kong, China
Greg Dore	Australia	Anna Lok Suk-Fong	USA	Hisao Tajiri	Japan
Christophe DuPont	France	Kaushal Madan	India	Nicholas Joseph Talley	Australia
Anders Ekbom	Sweden	Varocha Mahachai	Thailand	Narci Teoh	Australia
Geoffrey Charles Farrell	Australia	Govind Makharia	India	Judith Tighe-Foster	Australia
Ronnie Fass	USA	Peter Malfertheiner	Germany	Guido Tytgat	The Netherlands
Fock Kwong-Ming	Singapore	Takahisa Matsuda	Japan	Noriya Uedo	Japan
Ruggiero Francavilla	Italy	Amit Maydeo	India	James Versalovic	USA
Mitsuhiro Fujishiro	Japan	Kenneth E L McColl	United Kingdom	Wang Hsiu-Po	Taiwan
Peter Galle	Germany	Paul Moayyedi	Canada	William E Whitehead	USA
Edward Gane	New Zealand	Irvin Modlin	USA	Simon Wong Kin-Hung	Hong Kong, China
Uday Ghoshal	India	Moon Jong-Ho	Korea	Benjamin Wong Chun-Yu	Hong Kong, China
Peter Gibson	Australia	Ibrahim Mostafa	Egypt	Justin Wu	Hong Kong, China
Marc Giovannini	France	Horst Neuhaus	Germany	Naohisa Yahagi	Japan
Takuji Gotoda	Japan	Masao Omata	Japan	Hironori Yamamoto	Japan
Gwee Kok-Ann	Singapore	Evan Ong	Philippines	Ichiro Yasuda	Japan
Robert Heading	United Kingdom	Ooi Choon-Jin	Singapore	Kenjiro Yasuda	Japan
Janaki Hewavisenthi	Sri Lanka	Park Hyo-Jin	Korea	Neville Yeomans	Australia
Lawrence Ho Khek-Yu	Singapore	Teerha Piratvisuth	Thailand	Graeme Young	Australia
Bing Hu	China	Ronnie Poon	Hong Kong, China	Yu Ming-Lung	Taiwan
Pali Hungin	United Kingdom	Sundeep Punnamiya	Singapore	Yuen Man-Fung	Hong Kong, China
Richard Hunt	Canada	Qian Jia-Ming	China	Qi Zhu	China

Annual Scientific Meetings – GUT (Overseas Invited Faculty) (cont'd)

GUT 2011

27th to 29th May 2011, Kuala Lumpur

Ling Khoon-Lin	Singapore	Chan See-Ching	Hong Kong, China	See Teik-Choon	United Kingdom
Luigi Bolondi	Italy	Colm O'Morain	Ireland	Kao Jia-Horng	Taiwan
Lui Hock-Foong	Singapore	Philip Chiu Wai-Yan	Hong Kong, China	Yeoh Khay-Guan	Singapore
Hiroto Miwa	Japan	Ooi Choon-Jin	Singapore	George K K Lau	Hong Kong, China
Sybille Mazurek	Germany	Kang Jin-Yong	United Kingdom		

GUT 2012

29th June to 1st July 2012, Melaka

Henry Chan Lik-Yuen	Hong Kong, China	James Y W Lau	Hong Kong, China	Morris Sherman	Canada
Emad El-Omar	USA	Francesco Marotta	Italy	Shaw Somers	United Kingdom
Han Kwang-Hyub	Korea	Ravi Mohanka	India	Jose Decena Sollano	Philippines
Lawrence Ho Khek-Yu	Singapore	D Nageshwar Reddy	India	Jan Tack	Belgium
Richard Kozarek	USA	Jinsil Seong	Japan	Wong Ka-Tak	Hong Kong, China

GUT 2013

23rd to 25th August 2013, Penang

Alan Barkun	Canada	David Kwon	Korea	Takeshi Sano	Japan
Francis Chan	Hong Kong, China	Kenneth EL McColl	United Kingdom	Francis Seow-Choen	Singapore
Chien Rong-Nan	Taiwan	Ng Siew-Chien	Hong Kong, China	Vijay Shah	USA
Pierce Chow	Singapore	David Peura	USA	Justin Wu Che-yuen	Hong Kong, China
Michael A Kamm	Australia	Bjorn Rembacken	United Kingdom		

MSGH Oration Lecturers

NO	YEAR	ORATOR	TOPIC
1st	2001	P Kandasami Kuala Lumpur, Malaysia	Gastroenterology in Malaysia
2nd	2002	Barry J Marshall Perth, Australia	*Helicobacter pylori*: How it all came about and where do we go from here?
3rd	2003	Guido J Tytgat Amsterdam, The Netherlands	Future Developments in Gastroenterology
4th	2004	Lam Shiu-Kum Hong Kong, China	Pathogenesis of Gastric Cancer – A Unifying Concept
5th	2005	Meinhard Classen Munich, Germany	GI Cancer – The Global Burden in the New Millennium
6th	2006	John Wong Hong Kong, China	Multi-Disciplinary Treatment in Esophageal Cancer: The Price of Failure
7th	2007	Norman Marcon Toronto, Canada	New Optical Technologies for Early Detection of Dysplasia
8th	2008	Sydney Chung Hong Kong, China	Ulcer Bleeding: What you really want to know
9th	2009	Geoffrey Farrell Canberra, Australia	Battling the Bulge in Asia – Implications for Gastroenterologists
10th	2010	Nicholas Joseph Talley Newcastle, Australia	New Insights into the Aetiopathogenesis of Functional Dyspepsia
11th	2011	Colm O'Morain Dublin, Ireland	Colorectal Cancer – The Emerging Cancer in the 21st Century
12th	2012	Richard Kozarek Seattle, USA	Minimally Invasive/Interventional Gastroenterology: Where Have We Been? Where Are We Going?
13th	2013	Goh Khean Lee Kuala Lumpur, Malaysia	Asia at the Crossroads: Changing Patterns and Emerging Diseases

Panir Chelvam Memorial Lecturers

NO	YEAR	ORATOR	TOPIC
1st	2004	Mohd Ismail Merican Kuala Lumpur, Malaysia	Treatment of Chronic Viral Hepatitis in the Asia-Pacific Region: Realities and Practical Solutions
2nd	2005	Peter Malfertheiner Magdeburg, Germany	Diagnosis and Management of Pancreatic Cancer
3rd	2006	Nageshwar Reddy Hyderabad, India	GI Endoscopy in India – Developement and Lessons for the Future
4th	2007	Richard Hunt Hamilton, Canada	Evidence-based Medicine in the Real World
5th	2008	Pali Hungin Durham, United Kingdom	Plausible Solutions for Impossible Problems
6th	2009	Fock Kwong-Ming Singapore	Lower GI Bleeding – Epidemiology and Management
7th	2010	Joseph J Y Sung Hong Kong, China	The Future Role of the Gastroenterologist in Digestive Oncology
8th	2011	Kang Jin-Yong London, United Kingdom	East-West Differences in Upper GI Diseases
9th	2012	Emad El-Omar Aberdeen, United Kingdom	Role of Chronic Inflammation in GI Cancer
10th	2013	Michael Kamm Melbourne, Australia	Achieving the Balance between Drug Therapy and Surgery in Inflammatory Bowel Disease

Conference Information

CONGRESS SECRETARIAT

GUT 2014 & ECCO Educational Workshop
G-1 Medical Academies of Malaysia
210 Jalan Tun Razak, 50400 Kuala Lumpur, Malaysia
Tel (+603) 4025 3700, 4025 4700, 4023 4700 Fax (+603) 4023 8100
Email secretariat@msgh.org.my Website www.msgh.org.my

REGISTRATION

The registration hours are:

21st August 2014 (Thursday)	1600 to 1830 hrs
22nd August 2014 (Friday)	0730 to 1700 hrs
23rd August 2014 (Saturday)	0730 to 1700 hrs
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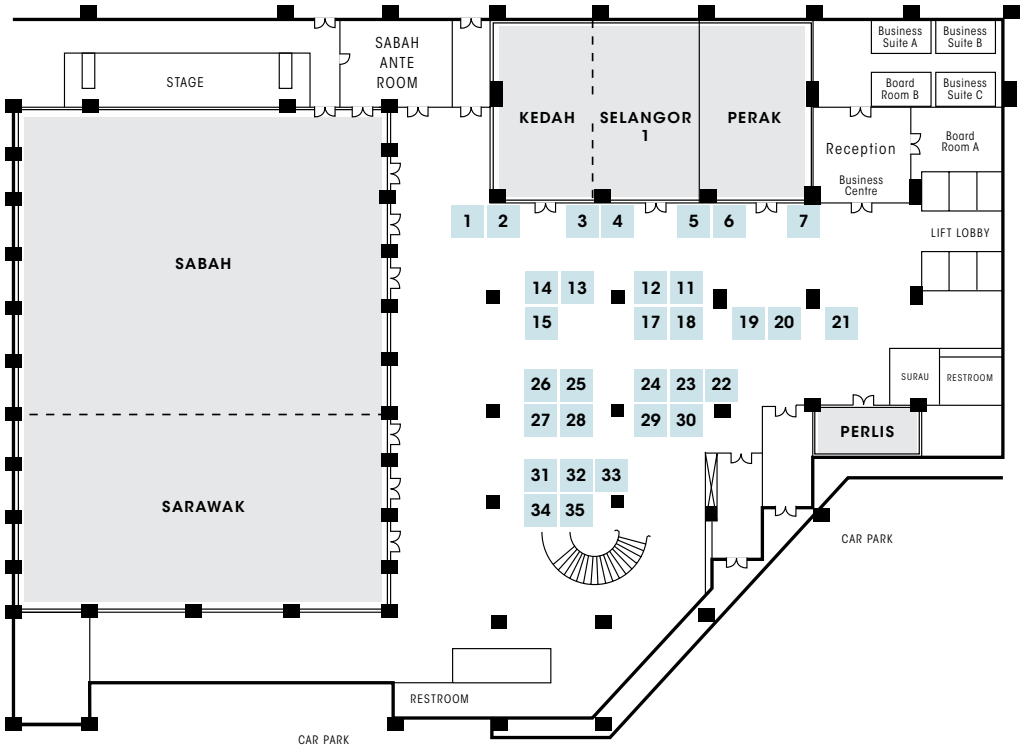

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NON-*H.PYLORI* GUT INFECTION – EVIDENCE FOR ITS ROLE IN FD

Alexander Ford

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Leeds Institute of Biomedical and Clinical Sciences, Leeds University, Leeds, United Kingdom

OBJECTIVE(S)

Some studies suggest that symptoms compatible with functional dyspepsia may occur following an episode of acute gastroenteritis, but data are conflicting.

Methodology

To review the literature, and review studies reporting the association between functional dyspepsia and acute enteric illness. Particular attention was paid to studies that reported the prevalence and incidence of symptoms compatible with functional dyspepsia following an acute enteric infection, as well as those that compared the prevalence of symptoms compatible with functional dyspepsia in individuals exposed to an acute gastroenteritis-type illness, compared with individuals who had not been exposed to such an illness.

Results

In a large series of dyspeptic patients undergoing investigation in Belgium, 17% reported an acute onset of symptoms, accompanied by other symptoms suggestive of an infective process, such as fever, myalgia, diarrhoea, or vomiting. The search also identified several studies that have examined the strength of association between functional dyspepsia and acute enteric illness, using either a cohort or case-control design. The prevalence of symptoms compatible with functional dyspepsia among individuals exposed to acute gastroenteritis varied from 1.5% to 43%, depending on the criteria used to define functional dyspepsia. Odds ratios for presence of functional dyspepsia in people exposed to an acute enteric illness versus those who were not exposed varied from 2.5 to 6.0. A systematic review that pooled data from these studies provided an overall estimated odds of developing functional dyspepsia after acute gastroenteritis of 2.18, although the strength of this association decreased with time from exposure to the infectious agent.

Conclusion

Taken together, these data suggest that one in five individuals with functional dyspepsia may describe an acute onset, with symptoms suggestive of an infective process. Among individuals exposed to acute gastroenteritis, up to 40% may develop symptoms compatible with functional dyspepsia, and this prevalence appears to be significantly elevated when compared with controls without such an exposure.

Symposium 1
Dyspepsia / GERD

ACID POCKET AND A DISRUPTED GASTRO-OESOPHAGEAL JUNCTION IN GORD

Lee Yeong Yeh
School of Medical Sciences, Universiti Sains Malaysia, Kota Bahru, Kelantan, Malaysia

Obesity is a major reason for the recent increase in incidence of gastro-oesophageal reflux disease (GORD) and cancers at the distal oesophagus and gastro-oesophageal junction (GOJ). This is mediated through a rise in the intra-abdominal pressure (IAP) but the exact mechanisms are unclear. Recently, raised IAP from obesity and with application of waist-belt have been shown to produce mechanical distortion of the GOJ through formation of partial hiatus hernia. Even though there is no trans-sphincteric acid reflux, there is increased ingress of acid into the lower sphincter (intra-sphincteric reflux) as a consequence of raised IAP. In addition, short segment acid reflux is more evident in obese subjects with a belt-on. The acid pocket is an area of postprandial unbuffered gastric acidity immediately distal to the GOJ and which is enlarged in patients with hiatus hernia. The acid pocket provides a reservoir of acid available to reflux when the intrinsic sphincter fails. Above mechanisms may explain the common occurrence of cardiac lengthening and inflammation found in asymptomatic obese subjects. Interventions that can reduce the mechanical distortion and acid exposure at the GOJ, including diet, exercise, drugs, sphincter augmentation therapy and surgery are clinically relevant in the treatment of GORD but more data are needed whether if these strategies are also effective in preventing cancer.

Symposium 1
Dyspepsia / GERD

UNDERSTANDING THE CLINICAL IMPLICATIONS OF FD/NERD AND FD/IBS OVERLAP

Nimish Vakil
University of Wisconsin School of Medicine and Public Health, United States

The definitions of Functional dyspepsia and irritable bowel syndrome are important for clinical research and clinical practice. Disease definitions are used to select medications, design protocols for new treatments for functional diseases and to allow physicians to compare data from different clinical trials. Regulatory agencies and managed care organizations use these criteria to approve or disapprove medical therapy for patients.

Recent studies how that that there is considerable overlap between different functional disorders such as IBS and FD and also between GERD and FD. The Rome III classification subdivides FD into Epigastric pain syndrome and Postprandial distress syndrome. Recent studies show an overlap between these syndromes as well

Understanding overlap syndromes is important to guide further therapy and research in functional GI disorders

INSIGHTS INTO OPTIMAL MANAGEMENT OF END STAGE LIVER DISEASE - A CONTINUING CHALLENGE

Patrick Kamath
Gastroenterologist and Hepatologist, Mayo Clinic, Rochester, United States

Cirrhosis is the final pathway for a variety of chronic liver diseases. It is one of the leading causes of mortality in patients in the most productive years of their lives. Strictly speaking, cirrhosis is a histological diagnosis, but a combination of clinical, laboratory, and imaging features help confirm the diagnosis of cirrhosis. However, a liver biopsy remains the gold standard for diagnosis of cirrhosis, though non-invasive modalities such as fibroelastography and magnetic resonance elastography can help confirm the diagnosis of cirrhosis.

Cirrhosis is classified broadly as compensated or decompensated. The development of complications such as jaundice, encephalopathy, ascites, and variceal hemorrhage characterize decompensated cirrhosis. There have been 4 clinical stages of cirrhosis proposed with stage 1 and 2 representing compensated cirrhosis and stage 3 and 4 representing decompensated cirrhosis. Most deaths in patients with cirrhosis occur as a result of hepatic decompensation. In the compensated stage, most deaths are related to cardiovascular disease followed by stroke, malignancy, and renal disease. However, most patients with cirrhosis will die because of decompensated cirrhosis and its complications which include variceal bleeding, ascites, hepatic encephalopathy, renal failure, sepsis, and hepatocellular carcinoma.

Therefore, the challenge in patients with cirrhosis is to keep them in a compensated state. The median survival in patients with compensated cirrhosis is approximately 9 to 12 years, compared with 2 years in those with decompensated cirrhosis. The 10 year probability of decompensation from a compensated state is approximately 60% with an annual rate of decompensation varying depending on etiology of liver disease, approximately 4% for HCV-related cirrhosis, and 6 to 10% with alcoholic cirrhosis, and even higher in those who actively drink. The rate of decompensation in HBV-related cirrhosis is 10%. The risk of decompensation is associated with serum albumin, MELD score, and HVPG.

Management of compensated cirrhosis includes surveillance for hepatocellular carcinoma with ultrasound every six months, screening for esophageal varices by upper endoscopy, stopping alcohol use, weight loss, and other lifestyle changes. Immunization against hepatitis A, hepatitis B, Pneumococcal pneumonia, and influenza is also recommended. Probably the most important modality to delay progression of compensated cirrhosis is treatment of the underlying cause of cirrhosis (chronic hepatitis B and C, abstention from alcohol, and weight loss). Once patients have decompensated cirrhosis, management is of the specific complication with definitive treatment being liver transplantation. The mainstay of treatment of variceal bleeding is pharmacological agents, endoscopic therapy, and transjugular intrahepatic portosystemic shunts (TIPS) when a combination of endoscopic and pharmacological therapy fails. Ascites is treated by large-volume paracentesis, sodium restriction, and diuretics with TIPS again for refractory cases. Hepatic encephalopathy is treated with lactulose and nonabsorbable antibiotics such as rifaximin. The optimal treatment for hepatocellular carcinoma is liver transplantation, though surgical resection may be considered in select patients as also radiofrequency or alcohol ablation of the tumor.

Lecture 3

11th Panir Chelvam Memorial Lecture

PROGRESS WITH ACUTE PANCREATITIS - MILLSTONES AND MILESTONES

John A Windsor

Department of Surgery, University of Auckland, Auckland City Hospital, New Zealand

Progress in our understanding of acute pancreatitis has been slow and intermittent. It remains the most common and the most expensive acute GI disease in the USA. And although the overall mortality rate has declined over the last century, there remains no specific treatment.

A number of millstones have retarded progress with acute pancreatitis, including the binary approach to severity classification, use of parenteral nutrition based on the concept of pancreas rest; the early operative intervention for sterile and infected necrosis; the widespread use of prophylactic antibiotics; the use of acute ERCP for all those with predicted severe pancreatitis; the attempts to interrupt the complex cytokine cascades with magic bullets; the yawning gap with the failure to translate numerous experimental treatments to clinical practice; and the promotion of aggressive fluid resuscitation as a foundation principle of acute management.

Evidence is now emerging that 'less is more' with the management of acute pancreatitis. A series of milestone developments will be highlighted including new approaches to severity prediction and classification; the re-definition of the local complications of acute pancreatitis; the emergence of less invasive and delayed treatments for infected pancreatic necrosis and with a primary role for percutaneous drainage; and new evidence for the role of toxic mesenteric lymph in the systemic inflammatory response and multiple organ dysfunction. These developments should propel the field towards specific and tailored treatments, and result in further outcome improvements.

PREDICTING DISEASE PROGRESSION AND MORTALITY IN NAFLD

Chan Wah Kheong
University Malaya Medical Centre, Kuala Lumpur, Malaysia

Non-alcoholic fatty liver disease (NAFLD) encompasses a spectrum of liver conditions, ranging from simple steatosis to non-alcoholic steatohepatitis (NASH) to fibrosis and cirrhosis. While the survival of patients with simple steatosis approach that of the general population, patients with NASH have a higher overall mortality which is partly attributed to progression of the liver disease, especially in those already with advanced fibrosis. Therefore, the prediction of disease progression and mortality hinges on the identification of those patients with NASH and/or advanced fibrosis. It is not practical to subject all NAFLD patients to a liver biopsy or repeated liver biopsies to assess disease severity. While NAFLD patients with elevated serum aminotransferase levels most likely have NASH, there are some NASH patients with normal serum aminotransferase levels. The NAFLD fibrosis score is calculated from readily available parameters and can be used to predict advanced fibrosis. However, using the NAFLD fibrosis score alone, 20 – 58 % of patients will fall in the indeterminate group and may require further evaluation with a liver biopsy. Transient elastography has been used to measure liver stiffness, which has been shown to correlate well with hepatic fibrosis in NAFLD patients. The use of liver stiffness measurement for patients with indeterminate or high NAFLD fibrosis score further reduces the number of patients who may require a liver biopsy compared to using the NAFLD fibrosis score alone while maintaining the accuracy to predict advanced fibrosis. However, the use of both tests for all patients provides no advantage over using either of the tests alone. The use of serum aminotransferase levels and the NAFLD fibrosis score, and liver stiffness measurement for patients with indeterminate or high NAFLD fibrosis score, appear to be the current best strategy in our day-to-day clinical practice to identify patients at risk of disease progression and mortality.

NON-ALCOHOLIC FATTY LIVER DISEASE – NEW CHALLENGES

Janaka de Silva
Department of Medicine, Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka

NAFLD is increasingly diagnosed in the Asia-Pacific region, and prevalence rates of 5-40% have been reported. As obesity among children becomes common, similar trends are being observed in the paediatric population; NAFLD has been reported to occur in 3% of the general paediatric population and in >50% of obese children. There are reports of NAFLD with advanced hepatic fibrosis and cirrhosis in young children and NAFLD in toddlers. NAFLD is now probably the most common cause of liver disease in preadolescents and adolescents. In Sri Lanka, 18.6% of children in urban schools were overweight or obese and NAFLD was detected in 18% of obese children.

A significant proportion of cryptogenic cirrhosis (CC) is likely to be NASH related. The main types of cirrhosis in Sri Lanka are alcohol induced (AC) and CC; >65% of our CC have diabetes or obesity, suggesting a relationship with NASH. We found overall survival in CC was similar to AC, although AC who abstained from drinking had better survival than CC. Death in both groups were predominantly liver related. Among Sri Lankan cirrhotics, chronic kidney disease (CKD) (HRS2 and Non-HRS2 CKD) results in increased short-term mortality, and >75% of non-HRS2 CKD were detected among CC.

About 7% of patients with NASH-cirrhosis develop hepatocellular carcinoma (HCC) within 10 years. Among 150 patients with CC related-HCC (n=89) and AC related-HCC (n=61), we found AC related-HCC had worse liver function and aggressive tumor morphology at presentation, and a higher proportion were untreatable. Among untreatable patients, median survival was also lower in AC related-HCC.

Living-donor liver transplantation has become an effective alternative to the cadaveric organ shortage in Asia. The presence of hepatic steatosis, a major concern for donors and recipients, results in poor outcome. NAFLD is a now a common reason for high donor rejection rates (40-50% reported).

DESIGNING THERAPEUTIC APPROACHES TO TREATMENT OF FATTY LIVER

Grace Lai-Hung Wong
Institute of Digestive Disease, Center of Liver Health, Department of Medicine and Therapeutics,
The Chinese University of Hong Kong, Hong Kong SAR, China

Non-alcoholic fatty liver disease (NAFLD) affects 15% to 40% of the general adult population and is the most common cause of abnormal liver biochemistry worldwide.[1,2] Some patients with NAFLD run a progressive clinical course and may develop cirrhosis and hepatocellular carcinoma.[3,4] Lifestyle modification is the cornerstone of the management of NAFLD.[5] Weight reduction by dietary intervention and/or exercise is associated with decrease in liver enzymes,[6] reduced liver fat,[7] and improvement in liver histology.[3] Our center recently reported the efficacy of a community-based low-glycemic index dietary intervention programme in the resolution of NAFLD.[8] The programme focused on food choices and coping techniques during at-risk situations. Resolution of NAFLD occurred in 65% in the intervention group, compared to 17% in the control group. This study demonstrated that the low-glycemic index dietary intervention programme is effective in reducing and normalizing liver fat in NAFLD patients in the community. [8]

Lifestyle interventions may not be effective in certain cases and thus pharmacological treatment has to be considered. Two insulin-sensitizing agents, metformin and thiazolidinediones (TZD), have been investigated in NAFLD, however there are conflicting results.[9] High doses of vitamin E (800 IU/d for 96 days) reduces hepatocellular inflammation, hepatic steatosis and improvements in liver function tests in non-diabetic patients with nonalcoholic steatohepatitis (NASH).[10] A meta-analysis of 135,967 people taking 400 IU/d of vitamin E found that there is an increase of all-cause mortality and therefore its use should be avoided.[11] Hence caution needs to be taken when prescribing vitamin E, especially to diabetic NASH patients, as there is no research to support vitamin E at this time for this population. Emerging data are also available for prebiotics, probiotics, and bariatric surgery as treatment for NAFLD.[12]

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Symposium 3
Managing Chronic Pancreatitis

NUTRITION AND MALABSORPTION

Nam Quoc Nguyen
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University of Adelaide, Adelaide, Australia

The pancreas is important in nutrient digestion and absorption. In chronic pancreatitis, both exocrine and endocrine insufficiency may develop leading to malnutrition over time, which can adversely affect outcomes if they are not treated. Poor oral intake from chronic abdominal pain and poor self-care can further contribute and worsen nutritional status. Thus, early nutritional assessment and intervention, as well as prevention of disease progression, are important measures in the management of patients with chronic pancreatitis. The management should be by multidisciplinary team approach and the mainstay of treatment is abstinence from alcohol, pain treatment, dietary modifications and pancreatic enzyme supplementation.

Symposium 3
Managing Chronic Pancreatitis

ENDOSCOPIC OPTIONS FOR MANAGING CHRONIC PANCREATITIS

Jong Ho Moon
Digestive Disease Center and Research Institute, Department of Internal Medicine,
Soon Chun Hyang University School of Medicine, Bucheon, Seoul, Korea

Chronic pancreatitis (CP) is an inflammatory process characterized by destruction of pancreas with formation of fibrosis. It often associated with complications, such as pancreatic ductal strictures with dilatation, parenchymal calcifications, intra-ductal stones, peripancreatic fluid collections. Most predominant symptom is chronic abdominal pain. Main purpose in the treatment of CP is control of symptoms. Current indications for endoscopic treatment in CP are obstruction of CBD, the presence of main pancreatic ductal obstruction by strictures or stones, and peripancreatic fluid collection. A distal CBD stricture by CP was treated with endoscopic sphincterotomy followed by insertion of 10 F plastic biliary stent. However, the long-term efficacy is not satisfactory with this treatment. Multiple biliary stenting using plastic stents can be a promising for better long-term outcome. Fully covered metal stent can use for this indication, also. However, more data are necessary before routine use of the metal stents for this indication. Benign stricture of the main pancreatic duct with upstream ductal dilatation can be treated by both a pancreatic and biliary sphincterotomy followed by insertion of larger than 5 F plastic pancreatic stent with or without stricture dilation. Long-term clinical improvement of pancreatic ductal stenting is acceptable, especially in patients with a shorter history of symptomatic CP. Multiple pancreatic stenting or fully covered metal stent can be advocated for longer clinical improvement. Future study is necessary to evaluate the efficacy of multiple pancreatic stenting comparing with single retrieval full covered metal stent insertion. The minor papilla can be an alternative route for main pancreatic ductal stenting when access via the major papilla is not possible. Endoscopic removal of pancreatic duct stone after extracorporeal shock-wave lithotripsy can be the best option for the improvement, especially in patients with chronic relapsing pancreatitis. A long-term follow-up will be necessary to determine the long-standing endoscopic success rates and stone recurrence rate. In conclusion, endoscopic palliation of CP can be a first-line therapeutic approach because it is minimally invasive, generally safe, and often effective.

SURGERY FOR COMPLCATIONS OF CHRONIC PANCREATITIS

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Chronic pancreatitis is associated with three main complications, pseudocyst formation, bilary obstruction and splenic vein obstruction leading to formation of gastric varices. Chronic pseudocyts rarely resolve spontaneously and may be associated with pancreatic duct changes. The role of surgery in management of pseuocysts is decreasing because of increased use of endoscopic procedures. The short term results with endotherapy are good but long-term follow-up data suggests surgery to be a better option. Despite introduction of newer biliary stents, biliary obstruction is still best managed by surgical bilioenteric bypass. Surgery gives one-time durable relief of biliary obstuction. Gastric varices following splenic vein obstruction need splenectomy only if they bleed. In patients who have not bled, observation is recommended.

BEST PAPER AWARD PRESENTATIONS

OP 1 ENHANCED RECOVERY AFTER SURGERY (ERAS) IMPLEMENTATION AFTER PANCREATICODUODENECTOMY 36

Affirul Chairil Ariffin[1], Ahmad Tarmizi Mohammad[2], Zamri Zuhdi[2], Azlanudin Azman[2], Hairol Azrin Othman[2], Razman Jarmin[2]

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OP 2 PREVALENCE OF *HELICOBACTER PYLORI* CAGA EPIYA MOTIFS, ETHNICITY AND CLINICAL OUTCOME IN DYSPEPTIC PATIENTS 37

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OP 3 PREDICTING NON-VARICEAL UPPER GASTROINTESTINAL REBLEEDING: ROCKALL AND BLATCHFORD SCORING, A COMPARISON 38

Henry Tan Chor Lip[1], Heah Hsin Tak[1], Sarojah Arulanantham[1], Premaa S[2]

[1]General Surgery Department, Hospital Sultan Ismail, Johor Bahru, Johor, Malaysia
[2]Clnical Research Centre, Hospital Sultanah Aminah, Johor Bahru, Johor, Malaysia

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Hwong-Ruey Leow, Yen-Yin Lim, Wei-Chee Liew, Khean-Lee Goh

Division of Gastroenterology and Hepatology, Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia

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Yeong Yeh Lee, Ong Ean Wah, Sangeta Vadivelu, Nik Mohd Yunus Mohammad Nik Fariza Husna Nik Hassan, Baharudin Abdullah

School of Medical Sciences, Universiti Sains Malaysia, Kota Bahru, Kelantan, Malaysia

OP 6 RANDOMISED, DOUBLE-BLIND PLACEBO CONTROLLED TRIAL ASSESSING THE EFFICACY OF ITOPRIDE IN POSTPRANDIAL DISTRESS SYNDROME (PDS): A PILOT STUDY 41

Z Q Wong[1], U N Nadira[2], J Naidu[1], C S Ngiu[1], R A Raja Ali[1], S Palaniappan[1] M Zawawi[1], H Razlan[1]

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OP 1

ENHANCED RECOVERY AFTER SURGERY (ERAS) IMPLEMENTATION AFTER PANCREATICODUODENECTOMY

Affirul Chairil Ariffin[1], Ahmad Tarmizi Mohammad[2], Zamri Zuhdi[2], Azlanudin Azman[2] Hairol Azrin Othman[2], Razman Jarmin[2]

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OBJECTIVE

Pancreatoduodenectomy is a technically challenging surgery requiring longer period of recovery post operatively. This study aims to examine the implementation of an enhanced recovery after surgery (ERAS) protocol following pancreatoduodenectomy.

METHODOLOGY

All patient undergone pancreatoduodenectomy were managed following ERAS protocol. Outcomes measured include postoperative morbidity, mortality, length of stay and readmission rate within 30 days. Protocol targets were: removal of NG tube (PoD1), resumptions of oral fluids (PoD2), mobilization, removal of IV fluids, removal of H-J drain and urinary catheter and discharges from high dependency unit (PoD3), tolerating soft diet (PoD4), removal of P-J drain (PoD5), tolerating normal diet and full mobilization (PoD6) and hospital discharge (PoD7).

RESULTS

Data were collected for 15 patients. Rates of mortality, morbidity and readmission were 7%, 53% and 20% respectively. The median length of stay was 10 days. The proportions of patients achieving key targets were; 40% for NGT removal; 67% for resumption of oral fluids; 60% for urinary catheter removal; 53% for HDU discharge; 53% for tolerating diet; 67% for meeting mobility targets, and 33% and 67% for H-J and P-J drain removal respectively. Four patients were discharged by PoD 7, eight patients by PoD 11 and 2 complicated patients were discharged within day 17.

CONCLUSIONS

ERAS protocol implementation in pancreaticoduodenectomy (PD) is feasible and safe. Achieving key target protocol was challenging. A further modification of the ERAS protocol may be needed to ensure more compliance.

PREVALENCE OF *HELICOBACTER PYLORI* CAGA EPIYA MOTIFS, ETHNICITY AND CLINICAL OUTCOME IN DYSPEPTIC PATIENTS

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OBJECTIVES

Helicobacter pylori is one of the most common worldwide human pathogens and is associated with gastritis, peptic ulcer, gastric cancer and gastric mucosa-associated lymphoid tissue lymphoma. *Helicobacter pylori* cytotoxin-associated antigen A (CagA) gene, the most virulence factor contains four segments flanking the EPIYA motifs, EPIYA-A, -B, -C, or -D, are believed to play an important role in gastroduodenal disease. The aim of this study is to determine the type of EPIYA Motifs, investigate whether the pattern of cagA EPIYA motifs was associated with ethnicity and clinical outcomes.

METHODS

This is a cross sectional study conducted between July 2012 to January 2014 among 226 dyspeptic patients at the Endoscopy Unit of Hospital Universiti Sains Malaysia and Hospital Kuala Lumpur. *H. pylori* cagA variable EPIYA motif was screened by polymerase chain reaction from gastric biopsies. Chi-square and Fisher's exact test was used in statistical analysis.

RESULT

Overall 105 (46.5%) were confirmed *H. pylori* positive, out of this cagA was detected in 73 (69.5%). The cagA genotype was mainly Western type (54. 79%) followed by the East Asian type (38.36%) and (6.85%) were unclassified (A-B type). Majority of Chinese patients was predominantly infected with CagA type A-B-D while cagA type A-B-C was detected in Indians and Malays. There were statistically significant difference ($P<0.001$) between race and cagA EPIYA motifs, although we could not find significant differences between EPIYA types and clinical outcomes.

DISCUSSION AND CONCLUSION

This study shows that EPIYA A-B-D is predominant in ethnic Chinese while EPIYA ABC was more common in Indians and Malays. There were significant difference ($P<0.001$) between ethnicity and cagA EPIYA motifs, however, there was no association between cagA EPIYA motifs and clinical outcome.

OP 3

PREDICTING NON-VARICEAL UPPER GASTROINTESTINAL REBLEEDING: ROCKALL AND BLATCHFORD SCORING, A COMPARISON

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OBJECTIVE

To determine and compare the predictive value of post-endoscopic Rockall Score(RS) and Glasgow Blatchford Score(GBS) risk scoring system with primary outcome of predicting 30days Rebleeding in Non-Variceal Upper Gastrointestinal Bleeding(UGIB).

METHADOLOGY

Retrospective review of all endoscopy records of patients whom underwent emergency Oesophago-Gastric-Duodeno-Scopy(OGDS) for indications of UGIB in Hospital Sultan Ismail, Johor Bahru between January2009 till May2013. All Non-Variceal UGIB patients were scored retrospectively using RS and GBS with outcomes of 30days Rebleeding, Mortality and need for Surgery. Patients with RS of ≥ 3 and GBS of ≥ 3 were classified as High Risk(HR). Using SPSS 15, sensitivity, specificity, negative & positive predictive values(PPV) and area under the receiver-operating characteristic curve(AUROC) was calculated.

RESULTS

511 patients was included, 68.7%(351/511) male, mean age of 60.7years with rebleeding rate of 16.4%(84/511). RS showed slightly better predictive value for rebleeding, mortality and surgery with AUROC 0.60(95%CI:0.54 , 0.67), 0.60(95%CI:0.53, 0.66) and 0.69(95%CI:0.61 , 0.77)respectively in comparison to GBS AUROC of 0.51(95%CI 0.45 , 0.58), 0.50(95%CI: 0.43 , 0.58) and 0.51(95%CI:0.40 , 0.63) for rebleeding, mortality and surgery respectively. Sensitivities for rebleeding, mortality and surgery for RS was 81%, 80% and 100% and GBS 100%, 98.6% and 100% respectively.

DISCUSSION

RS and GBS had high sensitivity (81% and 100% respectively) with low specificity (39.8% and 2.6% respectively) together with low rebleeding PPV for RS(20.9%) and GBS(16.8%) contributed to low AUROC rebleeding values. Base on the AUROC values (0.60 and 0.51), RS had low quality in comparison to GBS that had very low quality for prediction of rebleeding, mortality and need for surgery.

CONCLUSION

RS showed better predictive value in predicting rebleeding in comparison to GBS. RS is a better risk assessment score in comparison to GBS for rebleeding, mortality and need for surgery.

OP 4

CONTINUING DECLINE IN *HELICOBACTER PYLORI* AND ASSOCIATED UPPER GASTROINTESTINAL DISEASES IN A MULTI-RACIAL ASIAN POPULATION IN MALAYSIA

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INTRODUCTION

Dramatic changes in epidemiology of Gastrointestinal disorders were observed in Asia-pacific regions in recent years.

OBJECTIVE

To report on prevalence of upper gastrointestinal diseases between 2009-2010 in a multi-ethnic Asian population.

METHODS

Endoscopy records of patient that presented for first time gastroscopy between 2009-2010 in the University of Malaya Medical Centre, Kuala Lumpur, Malaysia, were reviewed.

RESULTS

4745 patients undergone first time endoscopy examinations between 2009-2010. Prevalence of peptic ulcer disease (PUD) was reported to be 2.5% and 3.4% respectively for duodenal ulcer (DU) and gastric ulcer (GU). *Helicobacter pylori (H.pylori)* infection was reported in 11.1% of patients. However only 6.7% of DU and 0.6% of GU were associated with *H.pylori* infection. Although Prevalence of gastric cancer (GCA) was only noted in 0.8% of patients, Chinese remains the highest at risk at 67.5%. Erosive oesophagitis (EO) was noted in 9.4% of patents. Higher proportion of Malay male (24.4%) and Chinese male (49.2%) had EO whilst the opposite was observed in the Indian. ($p = 0.023$). Prevalence of Barret's oesophagus and oesophageal cancer was reported in 0.4% and 0.3% respectively.

DISCUSSION

Comparing with historical data[1], prevalence of PUD continues to decline in keeping with reduction of *H.pylori* infection. Prevalence of EO increased steadily over the years in agreement with observations around the globe. Complications related to EO remains low. The decline of prevalence of GCA appears to correlate with an overall decrease in *H.pylori* infection with Chinese remains the highest ethnic group at risk.

CONCLUSION

Further decline in *H.pylori* infection is associated with dramatic reduction in peptic ulcer disease and gastric cancer whilst in contrary a further increased of erosive oesophagitis was observed in our population.

1. Goh K.L., et al., Time trends in peptic ulcer, erosive reflux oesophagitis, gastric and oesophageal cancers in a multiracial Asian population. Aliment Pharmacol Ther, 2009.29(7):p.774-80.

LARYNGOPHARYNGEAL REFLUX IN THE PRESENCE OF INEFFECTIVE ESOPHAGEAL MOTILITY IS ASSOCIATED WITH LARGE TRANSITION ZONE DEFECTS

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OBJECTIVES

Laryngopharnygeal reflux (LPR) is associated with ineffective esophageal motility (IEM) but mechanisms are not clear. Transition zone defects (TZDs) are associated with impaired bolus clearance in IEM. Whether TZDs are a cause for LPR in the presence of IEM is unknown. We aimed to examine the relationship between LPR and TZDs.

METHODS

Subjects with suspected LPR (positive symptoms and or laryngoscopy findings) were consented. High resolution 22-channels water-perfused esophageal manometry (MMS, Netherlands), 24-hour single pH- 6 channels impedance study (MMS, Netherlands) and 24-hour oropharyngeal pH study (Restech, USA) were performed in all subjects. Only those with IEM were subsequently analyzed for BMI, the size of TZDs, intra-bolus pressure (IBP) at TZDs and at distal segment, distal contractile integral (DCI), % failed peristalsis and % of proximal reflux at 15 cm from the lower esophageal sphincter (LES). Subjects with objective LPR as defined by a positive Ryan score (≥9.41) from 24-hour oropharyngeal pH study were then compared to those without objective LPR (Ryan score <9.41). A P value < 0.05 was considered significant.

RESULTS

Of 16 subjects screened, nine (F/M 5/4, mean age 50.1 years, mean BMI 23.3 Kg/m2) with IEM were eventually included into the study. Three subjects had objective evidence of LPR (mean Ryan score 15.0 ± 6.0). The mean BMI was significantly greater in subjects with vs. without LPR (26.7 vs. 21.3 Kg/m2, P=0.04). The size of TZDs was significantly larger in subjects with vs. without LPR (3.9 vs. 2.4 cm, P=0.03). Likewise, the IBP at TZDs was significantly greater in subjects with vs. without LPR (11.6 vs. 5.3 mmHg, P=0.01) but no such association was seen with distal segment IBP (7.5 vs. 4.5 mmHg, P=0.3). A positive correlation between the size of TZDs and BMI (R=0.9, P=0.03) and between IBP at TZDs with BMI (R=0.7, P=0.04) were seen. No differences were noted in subjects with vs. without LPR with regards to DCI (328.3 vs. 626.2 mmHg.s.cm, P = 0.6), % of failed peristalsis (53.3 vs. 33.3%, P = 0.5) and % of proximal reflux at 15 cm from LES (12.3 vs. 18.0%, P = 0.3).

CONCLUSION

LPR in the presence of IEM is associated with larger TZDs and a greater IBP at TZDs and BMI seems to play a role. Further studies are warranted.

RANDOMISED, DOUBLE-BLIND PLACEBO CONTROLLED TRIAL ASSESSING THE EFFICACY OF ITOPRIDE IN POSTPRANDIAL DISTRESS SYNDROME (PDS): A PILOT STUDY

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OBJECTIVE

Functional dyspepsia (FD) is a common global disorder that causes significant morbidity and time loss from work. Itopride, a prokinetic drug, has been demonstrated to be efficacious in improving FD symptoms compared with placebo. This study was conducted to evaluate the efficacy of itopride as compared to placebo in achieving symptom improvement and improvement in health-related quality of life in a subset of FD patients with post-prandial distress syndrome PDS / PDS overlap symptoms.

METHODOLOGY

This was a randomized double blind placebo controlled trial. Patients with PDS and PDS overlap symptoms were randomized to placebo or itopride 100 mg tds for 8 weeks. All patients were required to complete three questionnaires: Leeds Dyspepsia questionnaire (LDQ), Functional Dyspepsia Questionnaire (FDQ) to assess symptoms improvement and Short Form Nepean and Dyspepsia Index (SFNDI) to assess health related quality of life at weeks 0, 4 and 8 of treatment.

RESULTS

30 patients with PDS (n=12) and PDS overlap symptoms (n=18) were randomized. 16 patients received itopride treatment and 14 patients received placebo. Based on the assessment from LDQ, 13(81.3%) patients from the itopride group had symptom improvement compared to placebo (n=10; 71.4%) (p=0.526). Assessment from the FDQ also showed higher response rate of itopride compared to placebo 15(93.8%) patients vs 12 (85.7%) patients (p=0.90). For the health related quality of life assessment, 8 (50%) patients on itopride showed improvement compared to 6 (42.9%) patients on placebo(p=0.696). However these findings were not statistically significant. No major adverse drug reactions including galactorrhoea were reported in this study.

CONCLUSION

Both placebo and itopride demonstrated improvement in symptoms and health related quality of life in patients with PDS and PDS overlap symptoms. Itopride had a slightly better outcome compared to placebo. Itopride was well tolerated with minimal adverse drug reaction and it is safe to be considered as an option for patients with mainly PDS.

POSTER PRESENTATIONS

COMBINATION OF NAFLD FIBROSIS SCORE AND LIVER STIFFNESS MEASUREMENT FOR PREDICTING ADVANCED FIBROSIS IN NON-ALCOHOLIC FATTY LIVER DISEASE

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OBJECTIVE

The non-alcoholic fatty liver disease (NAFLD) fibrosis score (NFS) is indeterminate in a proportion of NAFLD patients. Combining the NFS with liver stiffness measurement (LSM) may improve the prediction of advanced fibrosis. We aim to evaluate the accuracy of NFS and LSM in predicting advanced fibrosis in NAFLD patients.

METHODOLOGY

The NFS was calculated and LSM obtained for consecutive adult NAFLD patients scheduled for liver biopsy. The accuracy of predicting advanced fibrosis using either modality and in combination were assessed. An algorithm combining the NFS and LSM was developed from a training cohort and subsequently tested in a validation cohort.

RESULTS

There were 101 and 46 patients in the training and validation cohort, respectively. In the training cohort, the percentages of misclassifications using the NFS alone, LSM alone, LSM alone (with grey zone), both tests for all patients and a 2-step approach using LSM only for patients with indeterminate and high NFS were 7.1%, 30.7%, 2.0%, 2.0% and 6.0%, respectively. The percentages of patients requiring liver biopsy were 30.7%, 0%, 36.6%, 36.6% and 16.8%, respectively. In the validation cohort, the percentages of misclassifications were 8.7%, 28.3%, 2.2%, 2.2% and 8.7%, respectively. The percentages of patients requiring liver biopsy were 28.3%, 0%, 41.3%, 43.5% and 17.4%, respectively.

DISCUSSION AND CONCLUSION

The novel 2-step approach reduced the number of patients requiring liver biopsy whilst maintaining the accuracy to predict advanced fibrosis. The combination of NFS and LSM for all patients provided no advantage over using either of the tests alone.

PP 2

CONTROLLED ATTENUATION PARAMETER FOR THE DETECTION AND QUANTIFICATION OF HEPATIC STEATOSIS IN NON-ALCOHOLIC FATTY LIVER DISEASE

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OBJECTIVE

Controlled attenuation parameter (CAP) has been suggested as a non-invasive method for detection and quantification of hepatic steatosis. We aim to study the diagnostic performance of CAP in non-alcoholic fatty liver disease (NAFLD) patients.

METHODOLOGY

Transient elastography was performed in consecutive NAFLD patients undergoing liver biopsy and non-NAFLD controls. The accuracy of CAP for the detection and quantification of hepatic steatosis was assessed based on histological findings according to the Non-Alcoholic Steatohepatitis Clinical Research Network Scoring System.

RESULTS

Data for 101 NAFLD patients (mean age 50.3±11.3 years old, 51.5% male) and 60 non-NAFLD controls were analyzed. CAP was associated with steatosis grade (OR=29.16, p<0.001), body mass index (BMI) (OR=4.34, p<0.001) and serum triglyceride (OR=13.59, p=0.037) on multivariate analysis. The median CAP for steatosis grades S0, S1, S2 and S3 were 184dB/m, 305dB/m, 320dB/m and 324dB/m, respectively. The AUROC for estimation of steatosis grades ≥S1, S2 and S3 were 0.97, 0.86 and 0.75, respectively. The optimal CAP cut-offs for estimation of steatosis grades ≥S1, S2 and S3 were 263dB/m, 281dB/m and 283dB/m, respectively. Among non-obese patients, the AUROC for estimation of steatosis grades ≥S1 and S2 were 0.99 and 0.99, respectively. Among obese patients, the AUROC for estimation of steatosis grades ≥S1, S2 and S3 were 0.92, 0.64 and 0.58, respectively.

DISCUSSION AND CONCLUSION

CAP is excellent for the detection of significant hepatic steatosis. However, its accuracy is impaired by an increased BMI and it is less accurate to distinguish between the different grades of hepatic steatosis.

LIMITED UTILITY OF PLASMA M30 IN DISCRIMINATING NON-ALCOHOLIC STEATOHEPATITIS FROM STEATOSIS – A COMPARISON WITH ROUTINE BIOCHEMICAL MARKERS

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OBJECTIVE

The utility of Cytokeratin-18 fragment, namely CK18Asp396 (M30), for the diagnosis of non-alcoholic steatohepatitis (NASH) is currently uncertain. We aimed to provide further data in this area among multi-ethnic Asian subjects with NAFLD.

METHODOLOGY

The accuracy of M30 for detecting NASH was compared with serum alanine aminotransferase (ALT), aspartate aminotransferase (AST) and gamma glutamyl transpeptidase (GGT) levels in consecutive adult subjects with biopsy-proven non-alcoholic fatty liver disease (NAFLD).

RESULTS

Data for 93 NAFLD subjects (mean age 51.0 ± 11.1 years old and 51.6 % males) and 20 healthy controls (mean age 50.2 ± 16.4 years old and 33.3 % males) were analyzed. There were 39 NASH subjects (41.9 %) and 54 non-NASH subjects (58.1 %) among the NAFLD subjects. Plasma M30 (349 U/L vs. 162 U/L), and serum ALT (70 IU/L vs. 26 IU/L), AST (41 IU/L vs. 20 IU/L) and GGT (75 IU/L vs. 33 IU/L) were significantly higher in NAFLD subjects than in healthy controls. Serum ALT (86 IU/L vs. 61 IU/L), AST (58 IU/L vs. 34 IU/L) and GGT (97 IU/L vs. 56 IU/L) were significantly higher in NASH subjects compared to non-NASH subjects, but no significant difference was observed with plasma M30 (435 U/L vs. 331 U/L). The accuracy of plasma M30, and serum ALT, AST and GGT was good for predicting NAFLD (AUROC 0.91, 0.95, 0.87 and 0.85, respectively) but less so for NASH (AUROC 0.59, 0.64, 0.75 and 0.68, respectively).

DISCUSSION AND CONCLUSION

The utility of M30 in the detection of NASH in clinical practice appears limited, in comparison to routine biochemical markers.

PP 4

MORBIDITY AND MORTALITY DIFFERENCES BETWEEN CRYPTOGENIC AND NON-CRYPTOGENIC CIRRHOSIS: A RETROSPECTIVE COHORT STUDY

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BACKGROUND

Cryptogenic cirrhosis is thought to be associated with the metabolic syndrome, but the consequences of this association have not been reported.

METHODS

A retrospective cohort study was conducted in a single academic centre, comparing the morbidity and mortality between cryptogenic and non-cryptogenic cirrhosis over a 5-year duration.

RESULTS

Complete data were available in 301 patients with cirrhosis (cryptogenic n=94, non-cryptogenic n=207). Patients with cryptogenic cirrhosis were older (mean age 66.4 vs. 60.7, $p < 0.0001$), had more females (43.6% vs. 26.6%, p=0.003), less severe disease severity (Child Pugh C 8.5% vs 15.9%, p=0.042) and a higher prevalence of the metabolic syndrome (83% vs. 51.2%, $p<0.0001$) compared with non-cryptogenic cirrhosis. During the 5-year study period, adults with cryptogenic cirrhosis had a longer total hospital admission stay compared to non-cryptogenic cirrhosis (median 10.5 vs 8 days, p=0.08). Further analysis demonstrated a longer hospital admission duration for cryptogenic cirrhosis due to non-liver related morbidity (median 19.0 days vs. 13.0 days, p=0.04), rather than liver related morbidity (median 14.0 days vs 11.0 days, p=0.06). A higher proportion of stroke (6% vs 2%, p=0.02) and cardiovascular disease (6% vs 3%, p=0.05) were responsible for the increased hospitalization for non-liver related morbidity in cryptogenic compared to non-cryptogenic cirrhotic patients. Kaplan-Meier survival analysis showed no significant difference in survival between both types of cirrhosis during the period of study (Log rank statistic 0.56).

CONCLUSION

Cryptogenic cirrhosis is associated with an increased morbidity, but not mortality, compared to non-cryptogenic cirrhosis. This difference is due to a greater burden of non-liver related complications in the former.

PREVALENCE OF IRRITABLE BOWEL SYNDROME AMONG UNIVERSITY STUDENTS IN LEBANON: THE ROLE OF PSYCHOSOCIAL AND LIFESTYLE FACTORS

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OBJECTIVES

This study aimed to describe the bowel habits and investigate the influence of lifestyle and dietary factors, on IBS prevalence among university students in Lebanon, a middle-income country in Asia.

METHODS

A cross-sectional study was conducted in 2014 across 5 major universities in Greater Beirut. Using proportionate random sampling, 815 students aged 18-25 years old participated in this survey. Participants completed an anonymous questionnaire which included: socio-demographic, dietary, lifestyle, and psychological variables. ROME III criteria were used to ascertain IBS and bowel habits. Stepwise multivariate logistic regression was used to measure the relationship between IBS and its associated factors.

RESULTS

Prevalence of IBS was at 24.7% among university students. Females were significantly more likely to report having IBS than males (29.1% vs. 18.2%, p-value<0.001). Results of the multivariate analysis revealed that those who consumed foods that trigger abdominal pain were 6 times more likely to report IBS than those who did not consume any trigger foods (OR=6.03; 95%CI:4.10-8.90). The odds of having IBS were 3 times higher among participants who experienced high levels of anxiety than those who did not report feeling anxious (OR=2.91; 95% CI: 1.92-4.41). Students living away from home (private house/ dormitory) were 2 times more likely to have IBS than those living at home (with family). Students with lower grades (OR=0.50;95%CI=0.33-0.72) and who engaged in physical activity (OR=0.56; 95%CI=0.37-0.84) were less likely to have IBS than their counterparts.

DISCUSSION AND CONCLUSION

This is the first population-based study to describe the nature of IBS among young adults in Lebanon. The prevalence of IBS among university students in our sample was higher than that reported in the West. Results show that dietary, lifestyle and psychological factors were significantly related to IBS. Multifaceted interventions can be adopted by universities to improve academic performance, stress management and quality of life among students with IBS.

KEYWORDS

Irritable Bowel Syndrome; Prevalence; ROME III; University Students; Lebanon.

PP 6

CLINICAL AND EPIDEMIOLOGICAL PATTERN OF ULCERATIVE COLITIS IN HOSPITAL TUANKU FAUZIAH, PERLIS

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BACKGROUND

Ulcerative colitis (UC) is known to be rare in Asia but recent publications have showed an increasing trend in the incidence. The aim of this study is to review the clinical and epidemiological pattern of UC in Hospital Tuanku Fauziah, Perlis.

METHOLOGY

This is a retrospective observational study of 10 patients were being diagnosed and followed up for UC in the Gastroenterology unit of Hospital Tuanku Fauziah from Jan 2002 till Apr 2014.

RESULT

Total of 10 cases was identified. There were 4 males (40%) and 6 females (60%). Patients of Malay ethnic origin were of majority (6 patients, 60%), followed by Chinese (3 patients, 30%) and Siamese (1 patient, 10%). The overall prevalence rate was 4.4/100,000, highest among the Chinese (14.2/100,000) compared to the Malays (3.4/100,000).Mean age of presentation was 46.4(range 27 - 72). Majority had no history of smoking prior to disease onset. The most common presenting symptom was abdominal pain (80%), followed by diarrhea (70%), PR bleed (60%), passing out mucus (30%) and weight loss (20%). The extent of disease: proctitis (10%), sigmoid colon (40%), descending colon (10%), transverse colon (20%) and pancolitis (20%). None of them have extra intestinal manifestations. Majority of patients had mild disease and treated with 5-ASA. 3 patients (30%) required azathioprine and 1 patient (10%) received 6-Mercaptopurine. None of them developed complications and no surgical interventions were required. At a mean follow up of 45 months (2 - 148), 90% had static disease or regression. One patient (10%) had 2 relapses in the course of disease. None of the patients developed colorectal cancer.

CONCLUSION

In Perlis, UC is more commonly seen among Chinese population. The age of onset is relatively high. The course of disease is mild with no extra intestinal manifestations. Most patients responded well to oral medications.

AUTOPHAGY SELECTIVELY REGULATES MIR-224 TO SUPPRESS HBV-ASSOCIATED LIVER TUMORIGENESIS

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OBJECTIVE

In HCC, dysregulated expression of microRNAs and autophagy deficiency are reported, individually. However, the relationship between autophagy deficiency and dysregulated miRNAs is still unclear. We revealed a novel mechanism that autophagy preferentially recruits and degrades a miR-224. We further confirmed that suppressed autophagy promotes the accumulation of oncogenic miR-224, which contributes to HBV-associated tumor progression.

METHODOLOGY

Night three paired HCC specimens and HBx-transgenic mice were used to clarify the correlation among autophagy, miR-224 and its target gene Smad4 by real-time PCR, in situ hybridization and immunohistochemical staining of tissue array. Combining autophagosome extraction protocol, with immunoflunorescent staining, real-time PCR and electronic microscopy, we are the first to demonstrate that autophagosomes selectively recruit miR-224. TranswellTM assay and xenograft tumor formation in NOD/SCID mice were used to clarify the characteristics of miR-224 and its target-gene Smad4. Finally, orthotopic transplantation of liver tumor formation in SD rat was utilized to verify the relative expression of autophagy and its ability to suppress tumor formation.

RESULTS

In HBV-associated HCC specimens, miR-224 expression is higher in the tumors than in the adjacent non-tumor tissues, and miR-224 is negatively correlated with Atg5 and Smad4 expression. This phenomenon is confirmed in HBx-transgenic mice. Furthermore, Autophagy selectively recruits and degrades miR-224, which plays an oncogenic role in cell migration and tumor formation through silencing Smad4. In the orthotopic liver tumor model, we first demonstrated that amiodaroneTM (an autophagy inducer) could induce autophagic activity and subsequently suppresses liver tumor formation.

DISCUSSION AND CONCLUSION(S)

We reveal that low autophagic activity leads to increased miR-224 expression, which contributes to HBV-associated HCC progression. Our novel findings open a new avenue for the treatment of HBV-associated HCC.

ABBREVIATIONS

Atg, autophagy-related genes; HBV, hepatitis B virus; HBx, hepatitis B virus X protein; HCC, hepatocellular carcinoma.

PP 8

THE SCOPE CLIP (OTSC) SYSTEM APPLICATION IN THE ENDOSCOPIC MANAGEMENT OF DUODENAL ULCER: A CASE REPORT

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The Over-The-Scope-Clip (OTSC) has been described to be succesful in providing homeostasis in duodenal ulcer.

OBJECTIVE

In this case report we described an application of the OTSC system in the endoscopic management of the duodenal ulcer.

RESULT

OTSC has successfully secured the homeostatis in Forrest 1a duodenal ulcer.

DISCUSSION

There are many endoscopic treatments for bleeding duodenal ulcer and OTSC is one of them. Conclusion: Endoscopic application of the OTSC system is effective treatment in providing homeostasis in the duodenal ulcer.

PP 9

ENDOSCOPIC REPAIR OF AN ANASTOMOTIC LEAK USING OVER THE SCOPE CLIP (OTSC) SYSTEM: A CASE REPORT

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Fistula and anastomosis are significant complications post gastrointestinal surgery. The Over-The-Scope-Clip (OTSC) has been described to be a successful treatment for closure of the fistula and anastomosis.

OBJECTIVE

In this case report we described a successful closure using OTSC system of an anastomotic leak at the gastro-oesophageal junction following partial gastrectomy.

RESULTS

This case report has decribed the successful closure of the anastomotic leak at the gastrooesophageal junction.

DISCUSSION

The OTSC system is flexible and able to avoid surgery in this case.

CONCLUSION

Endoscopic application of the OTSC system is safe, effective and less invasive alternative to surgery for treatment of anastomic leak.

PP 10

OESOPHAGOBRONCHIAL FISTULA: CASE REPORT

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Oesophagobronchial fistula can be due to benign and malignant causes. Malignant cause though being the most common, infections such as tuberculosis should always be kept in mind as the other differentials.

OBJECTIVE

In this case report we described the management of oesophagobronchial fistula and possible causes for it.

RESULTS

We have described the successful management of oesophageal fistula using repeated endoscopic balloon dilatation.

DISCUSSION

Endoscopic Balloon Dilatation of malignant strictures may potentially reverse such fistulas hence improves dysphagia. Staging of oesophageal malignancy can be done successfully and accurately via Endoscopic Ultrasonogram (EUS) provided there is no stricture that may prohibit the passage of scope.

CONCLUSION

Oesophageal dilatation can be successfully performed in patient with oesophagobronchial fistula.

PP 11

ENDOSCOPIC ULTRASOUND WITH FINE NEEDLE ASPIRATION: A FEASIBLE TECHNIQUE IN A FIVE YEAR OLD CHILD

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INTRODUCTION

Endoscopic Ultrasound (EUS), with or without Fine Needle Aspiration (EUS-FNA), has been extensively used as a diagnostic and therapeutic tool in the adult population. This has been explored in the paediatric population only in recent years, usually by adult gastroenterologists.

AIM

To report the outcome of a successful EUS-FNA performed in a five year old boy at the Sarawak General Hospital, Malaysia.

RESULT

A five year old boy presented with a month history of gastric outlet obstruction and anaemia. Physical examination revealed pallor, and a large, non-tender, epigastric mass.

His Haemoglobin was 5.1 g/dL and the Lactate Dehydrogenase was markedly raised at 1058 U/L. There was iron deficiency anaemia with thrombocytosis, but absence of immature cells on peripheral blood film.

Computed tomography scan (CT scan) showed a non-obstructing large tumour in the region of duodenum. Oesophagogastroduodenoscopy (OGDS) under general anaesthesia showed an extrinsic compression of the antrum and the first part of the duodenum, with normal mucosa. This was followed with EUS using the PentaxEG-3270UK slim linear echoendoscope. FNA was performed using a 22G Cook Medical ProCore FNA needle, with in-room cytology demonstrating abundant lymphocytes. The cytology was reported as malignant small round blue tumour, favouring lymphoblastic lymphoma. This was later confirmed to be Non Hodgkin's lymphoma, mature B phenotype from the cell block preparation. The patient was subsequently started on chemotherapy and has responded well.

CONCLUSION

EUS or EUS FNA, although technically challenging, is feasible and safe in the paediatric population if performed by experienced gastroenterologists. The presence of rapid on-site examination (ROSE) during FNA ensures a rapid diagnosis and should be the current standard of care, where possible.

SERUM IFN-γ AND IL-6, BUT NOT IL-17 CONCENTRATIONS ARE POSITIVELY CORRELATED WITH HARVEY-BRADSHAW INDEX SCORES IN UMMC PATIENTS WITH CROHN'S DISEASE

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BACKGROUND

Crohn's disease (CD) is related to a T-helper type 1 (Th1) immune response, with large quantities of interferon (IFN)-γ being produced by mucosal CD4+ cells. Interleukin (IL)-6 drives early Th17 cell differentiation, another T-helper cell subtype which is also involved in gut inflammation and identified by IL-17 production. The role of IL-17 in the pathogenesis of CD however is still being investigated.

STUDY OBJECTIVE

To identify the relationship of serum IFN-γ, IL-6 and IL-17 concentrations to disease activity in a cohort of CD patients from the University Malaya Medical Centre (UMMC) in Kuala Lumpur, Malaysia.

METHODOLOGY

Peripheral blood samples were obtained from CD patients and control subjects who attended the UMMC Gastroenterology Clinic. IFN-γ, IL-6, and IL-17 concentrations were measured using ELISA kits (Biolegend, USA) in sera acquired following Ficoll-Paque (GE Healthcare, USA) density centrifugation. Clinical disease activity was measured using the Harvey-Bradshaw Index (HBI).

RESULTS

A total of 24 CD patients (16 in remission, 6 active disease) and 9 control subjects were recruited. Compared to controls CD patients in remission did not have significantly raised serum IFN-γ concentrations ($p=0.08$), while there was a significant rise in patients with active disease ($p<0.05$). IL-6 was raised in both groups of CD patients ($p<0.01$ for those in remission and $p<0.01$ with active disease). IL-17 however was not shown to be increased in both groups of CD patients ($p=0.11$ for patients in remission, and $p=0.07$ for those with active disease). Pearson's r for the correlation between HBI score and cytokine levels was 0.62 for IFN-γ ($p<0.01$), 0.43 for IL-6 ($p<0.05$) and -0.03 for IL-17 ($p=0.91$).

CONCLUSION

In our cohort of CD patients serum IFN-γ and IL-6, but not IL-17 concentrations were associated with clinical disease severity. Questions remain on the role of IL-17 in relation to the gut inflammation seen in CD.

USE OF ROCKALL AND BLATCHFORD SCORING IN PREDICTING NEED FOR SURGERY IN NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING

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OBJECTIVE

To determine and compare the predictive value of post-endoscopic Rockall Score(RS) and Glasgow Blatchford Score(GBS) risk scoring system with primary outcome of predicting the need for surgery in Non-Variceal Upper Gastrointestinal Bleeding(UGIB).

METHADOLOGY

Retrospective review of all endoscopy records of patients whom underwent emergency Oesophago-Gastric-Duodeno-Scopy(OGDS) for indications of UGIB in Hospital Sultan Ismail, Johor Bahru between January2009 till May2013. All Non-Variceal UGIB patients were scored retrospectively using RS and GBS with outcomes of need for Surgery, Rebleeding and Mortality within 30days. RS score of ≥ 3 and GBS score of ≥ 3 was classified as High Risk(HR) patients. Using SPSS 15, sensitivity, specificity, negative & positive predictive values(PPV) and area under the receiver-operating characteristic curve(AUROC) was calculated.

RESULTS

511 patients was included, 68.7%(351/511) male, mean age of 60.7years with 4.5%(24/511) requiring surgery. RS showed slightly better predictive value for surgery with AUROC 0.69(CI 95%:0.61 , 0.77) in comparison to GBS AUROC 0.51(CI 95%:0.40 , 0.63) with both scores having 100% sensitivity. RS showed slightly better predictive value for rebleeding and mortality AUROC 0.60(95%CI:0.54 , 0.67), 0.60(95%CI:0.53, 0.66)respectively in comparison to GBS AUROC of 0.51(95%CI 0.45 , 0.58) and 0.50(95%CI: 0.43 , 0.58) for rebleeding and mortality respectively.

DISCUSSION

Original RS and GBS were used to stratify patients at risk for mortality and need for endoscopic intervention respectively. We tried to use RS scores and GBS scores to predict patients at HR for surgical intervention. Despite both RS and GBS had 100% sensitivities, the low specificity (38.2% and 2.3% respectively) led to the low AUROC values with RS performing slightly better than GBS.

CONCLUSION

The use of RS had slightly better predictive value for the need of surgery in comparison to GBS. RS is a better risk assesment score for prediction the need for surgery in comparison to GBS.

AWARENESS AND KNOWLEDGE OF NON-ALCOHOLIC FATTY LIVER DISEASE AMONG PATIENTS ATTENDING GASTROENTEROLOGY OUT PATIENT CLINICS AT THE UKM MEDICAL CENTRE (UKMMC)

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INTRODUCTION

Non-alcoholic fatty liver disease (NAFLD) is becoming a major contributor of chronic liver disease worldwide including Malaysia.

OBJECTIVE

We aimed to explore the awareness, knowledge and complications of NAFLD among patients attending gastroenterology clinics which may be useful to promote primary prevention, early detection and treatment of NAFLD in the future.

METHODS

A survey of patients who attended gastroenterology clinics from April to July 2014 was conducted. The questionnaires consist of awareness, predisposing factors, diagnostic methods, prevention, early treatment and severity of NAFLD to patient's health along with demographic details and level of educations. The questionnaires also addressed awareness of cirrhosis and other chronic diseases which may progress to cirrhosis.

RESULTS

546 surveys were analyzed. Age categories / gender / ethnicity of respondents: 46% > 60, 38% between 40-60 and 16% < 40 years old / 46% males and 54% females / 47% Malays, 44% Chinese and 9% Indians and other ethnicity. 38% of respondents had tertiary education level. A total of 57% (309 / 546) respondents have heard about NAFLD and the most identified risk factors for NAFLD were dyslipidemia (66%), obesity (50%) and lack of exercise (48%). Blood test and liver ultrasound were chosen by 46% of respondents as methods of diagnosis for NAFLD, 73% believed NAFLD is preventable and 76% believed it is curable if treated early. A total of 32% respondents were aware that cirrhosis could result from NAFLD, 26% by alcohol, 25% by chronic hepatitis B and 13% by hepatitis C. A significant proportion of the respondents (78%) were aware of NAFLD can cause severe long term health problem.

CONCLUSIONS

This survey has demonstrated an acceptable awareness and knowledge of NAFLD among patients attending gastroenterology clinics at the UKMMC. Majority of them believed NAFLD is preventable, curable if treated early and that it can pose severe long term health problem. Thorough consultation by physicians is essential in adopting preventive strategy for NAFLD.

PP 15

MANAGING A GIANT PANCREATIC ABSCESS – A DISTRICT HOSPITAL EXPERIENCE: CASE REPORT

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BACKGROUND

Pancreatic abscess is a late complication occurring more than 2 weeks after initial episode of pancreatitis. The mortality rate associated with pancreatic abscess may exceed 20% or more with infected pancreatic necrosis and is largely related to sepsis and multiorgan dysfunction (MOD).

CASE REPORT

A 72 year old Malay lady was admitted to the intensive care unit for Acute Severe Pancreatitis with MODs. Serum Amylase level was2760 iu/L. Per Abdominal examination revealed tenderness and guarding at the epigastrium. She was ventilated in ICU and had persistent spikes in temperature. She later developed a large pancreatic abscess at the porta hepatis measuring 15cm x 8.4cm. Decision was made to manage conservatively in view of risk outweighing benefit. She was treated aggressively with antibiotics and CRP levels were monitored. She was subsequently weaned of the ventilator and discharged home upon request. However she presented to us a week later in sepsis and the abscess had increased in size with extra-abdominal extension which was drained percutaneously. After 2 weeks of admission she was discharged home well. She is now planned for Cholecystectomy.

DISCUSSION & CONCLUSION

A multidisciplinary and comprehensive management plan should be employed in reducing the mortality rate. This includes rapid evaluation and assessment of the degree of physiological and anatomical derangement, adequate fluid resuscitation, identifying septic foci and aggressive surgical debridement. However surgical approach depends on clinical presentation, condition and localization of the abscess. Endoscopic & Percutaneous drainage being minimally invasive and safe is the gold standard approach in unstable patients. However lack of expertise and logistics reasons in a district setting has greatly compromised this method of endoscopic drainage. A multidisciplinary approach, prolonged antibiotic therapy directed against the causative organism and Percutaneous Catheter Drainage has proven to be a success in managing a patient with giant pancreatic abscess.

AN EVALUATION OF THE IMPACT AND EFFECTIVENESS OF E-REMINDERS TO PATIENTS ATTENDING ENDOSCOPIC PROCEDURES AT THE UKM MEDICAL CENTRE

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INTRODUCTION

The non-attendance for endoscopic procedures result in wasted resources and increases the waiting list inappropriately. It can potentially be resolved by sending out text message as advance reminders prior to endoscopic procedures.

OBJECTIVE

The aim of the study is to evaluate the impact and the effectiveness of e-reminders in reducing the non-attendance rate for endoscopic procedures as well as reducing the waiting list for endoscopic procedures.

METHODOLOGY

All patients attendingout-patient endoscopic procedures from February to April 2014 were included. E-reminders were sent to all of them at least 3 days prior to the procedures and the endoscopic phone number was given for necessary discussion pertaining to bowel preparation, change of appointment, cancellation and postponement of the appointments.

RESULT

A total of 298 patients received e-reminders during the study period and 60 (20.1%) of them had replied to the e-reminder by ringing the staff at the endoscopic unit. Out of 60 patients, 21 (35%) had requested to change the date of appointment, 19 (31.7%) had to cancel the procedures due to unavoidable circumstances, 16 (26.7%) informed that they have already underwent the procedures mostly within 3 months and 4 (6.7%) patients were not clear about the e-reminders leading to unnecessary phone call. A total of 39 (13.1%) endoscopic procedures were replaced mostly by in-patients as results of the cancellation and double-booking of the endoscopic procedures. A total of 221 patients who received and did not reply the e-reminders attended the endoscopy procedures whereas 17 patients who did not attend endoscopy although presumably received the e-message were non-contactable.

CONCLUSION

Majority of the patients attended the scheduled endoscopies after receiving e-reminders. However, an e-reminder, text messaging was not significantly successful in reducing the non-attendance rate for endoscopy despite the high proportion of patients with mobile phones. The findings also suggest that e-reminder is a good tool to improve the attendance for endoscopy but require a clear explanation to avoid unnecessary phone calls from the patients.

PP 17

CHRONIC HEPATITIS C: THE KOTA BAHRU EXPERIENCE

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BACKGROUND

Chronic Hepatitis C is a major cause of liver cirrhosis and hepatocellular carcinoma. It affects approximately 170 million people worldwide. There has been a recent surge in the development of treatment of hepatitis C, with the introduction direct acting antivirals, which has shown promising results. However for many resource limited centres, pegylated interferon and ribavirin remains the standard of care.

OBJECTIVE

Primary objective of this study was to assess the SVR (sustained virological response) in our centre using pegylated interferon and ribavirin.

METHODOLOGY

Retrospective study of treated Chronic hepatitis C patients seen in our Gastroenterology clinic between March 2005 till July 2012

RESULTS

Our sample population was 30 patients. HCV genotype 3 was the most prevalent (60%, n=18), followed by genotype 1 (36%, n=11), and we had 1 patient with genotype 4. Following treatment, we attained SVR rates of 72 % for genotype 3, 63.6% for genotype 1, and 100 % for genotype 4.

CONCLUSION

Treatment with Pegylated interferon and ribavirin is still the standard care in many resource limited centres, and is associated with fairly reasonable success rates.

PREVALENCE OF DEPRESSION AND SUICIDAL IDEATION AMONG PATIENTS WITH INFLAMMATORY BOWEL DISEASE AT UKM MEDICAL CENTRE

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INTRODUCTION

Psychosocial disorders such as anxiety, depression and suicidal ideation are well known long term complications of inflammatory bowel disease (IBD) among Caucasian patients. Little is known about the effect of chronic IBD on psychosocial disorders among Asian patients who have different social-cultural background compared to Caucasian patients.

OBJECTIVE

To determine the prevalence and predisposing factors contributing to depression and suicidal ideation among IBD patients at UKM Medical Center.

METHODOLOGY

A prospective cross sectional study of IBD patients was performed for 6 months at our gastroenterology unit. Patients were interviewed and socio-demographic along with clinical data were recorded. The Hospital Anxiety and Depression Scale (HADS) and Columbia Suicide Severity Rating Scale (C-SSRS) were used to determine the presence of anxiety, depression and suicidal ideation respectively.

RESULTS

A total of 45 patients [17 (37.8%) Crohn's Disease (CD), 28 (62.2%) Ulcerative Colitis (UC),] was recruited. The mean age for CD (male: female ratio, 1:1) and UC (male: female ratio, 2:1) patients was 26.18±10.60 and 44.68±16.91 years respectively. The mean duration of illness was 28.47 ± 21.12 months for CD patients and 56.54 ± 69.88 months for UC patients. The Mean Harvey Bradshaw Index (HBI) for CD and Simple Clinical Colitis Activity Index (SCCAI) score for UC patients were 3.65±2.40 and 4.07±2.26 respectively. There were a total of 10 (26.7%) IBD patients with psychosocial disorders: 3 (17.64%) CD patients and 5 (17.86%) UC patients noted to suffer from anxiety and also 2 (11.74%) CD patients and 2 (7.15%) UC patients had depression. None of the patients had suicidal ideation. The age, sex, education level, disease duration and indices were not statistically significant in predisposing these patients to anxiety and depression.

CONCLUSION

The prevalence of psychosocial disorders such as anxiety, depression and suicidal ideation is still low among Asian patients with IBD. However, as the incidence of IBD increases in Asia, psychosocial disorders will rise and therefore awareness to diagnose and timely intervention is required to prevent unnecessary morbidity and mortality.

PP 19

PREVALENCE AND EPIDEMIOLOGY PERSPECTIVES OF *HELICOBACTER PYLORI* INFECTION IN PATIENTS WITH DYSPEPSIA IN A PERIPHERY HOSPITAL

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OBJECTIVE

To detect the prevalence of *Helicobacter Pylori* (*H.pylori*) infection among patients diagnosed with dyspepsia and to find the epidemiology perspectives of *H.pylori* infection in a periphery hospital.

METHODOLOGY

Retrospective data of 118 patients with dyspepsia were identified through endoscopy records from June 2013 to May 2014. Upper endoscopy was performed on all patients. Antrum and body biopsies were taken from patients who were found to have gastritis, duodenitis, gastric ulcers and duodenal ulcers. *H.pylori* status was determined by positive culture. The data was analysed using SPSS statistics software windows version 17.0.

RESULTS

A total 118 patients with dyspepsia had upper endoscopy between June 2013 to May 2014. Their age ranged from 22 to 80 years with median age of 53.0. Fourteen patients had normal endoscopy findings. 104 patients underwent biopsies and 20 patients (19.2%) were positive for *H.pylori*. Among the positive patients, 15.1 %(n=53) patients were male and 23.5% (n=51) were female. Indians had highest prevalence of *H.pylori* infection, 35.3% (n=6/17) followed by Chinese 19.0% (n=4/21) and Malays 15.9% (n=10/63).On endoscopy, there were 59 patients with gastritis of which 16.9% were positive for *H.pylori*, 23 duodenitis of which 34.8% positive and 5 duodenal ulcers of which 40% were positive. *H.pylori* infection among smokers is higher, 29.4% (n=10/34) and non smokers 14.3 %(n=10/70).

DISCUSSION & CONCLUSION

H.pylori infection is declining in Malaysia. There is a consistent and significant difference in *H.pylori* prevalence among the ethnic groups, being highest in Indians followed by Chinese. Patients with duodenal lesions were more commonly infected with *H.pylori*. Prevalence of *H.pylori* is also higher among the smokers. Further formal research is needed in a larger number of population samples to study the epidemiology of *H.pylori* infection.

PP 20

PREVALENCE OF COLORECTAL CARCINOMA IN THE PATIENTS WITH POSITIVE IMMUNOCHEMICAL FECAL OCCULT BLOOD TEST IN SERDANG HOSPITAL

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OBJECTIVE

To study the prevalence of colorectal carcinoma among the patients that attended for immunochemical fecal occult blood test (i-FOBT) in Serdang Hospital, Malaysia.

METHODOLOGY

A retrospective cross section study design was carried out by collecting and assessing 814 patients who have done i-FOBT in Serdang Hospital from 1st January 2012 to 30th June 2013.

RESULTS

There are 36% (295/814) patients with positive i-FOBT result and most of the patients came from the age group more than 59 years old which is about 49.6%. Among 814 patients, 435 (53.4%) were female and 379 (46.6%) male. Majority of the patients were Malay (56.6%) followed by Chinese (24.0%), Indian (16.5%) and others (2.9%). Anemia was the commonest indication for i-FOBT, which is about 83.8%. Only 71 patients did the colonoscopy, and the commonest finding was polyp. 7% (5/71) patients were diagnosed with colorectal carcinoma. The association between colonoscopy finding with the result of i-FOBT is significant since the p value is 0.001. The prevalence of positive i-FOBT was 10%, sensitivity was 67%, specificity was 43%, positive predictive value was 10% and negative predictive value was 93% in detecting colorectal cancer.

DISCUSSION AND CONCLUSION

The association between positive colonoscopy finding with the positive result of i-FOBT was significant.[p=0.001]. In other words, the result of i-FOBT was useful for indication of any abnormalities in lower gastrointestinal tract because it can detect the source of blood coming from lower gastrointestinal tract. However the prevalence of colorectal carcinoma in those with positive result of i-FOBT was low. This could be due to the limitations of our study as many patients with positive i-FOBT did not proceed to colonoscope, and the small sample size of this study.

PP 21

A DECADE'S REVIEW OF ABSTRACTS PRESENTED AT THE MSGH SCIENTIFIC MEETINGS: ARE WE NEGLECTING COMMON COMPLAINTS, THE RISING OF COLORECTAL CANCER AND BASIC SCIENCE?

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Malaysian Society of Gastroenterology and Hepatology (MSGH) annual scientific meeting currently known as GUT has been held since 1996. The principal aim of the meeting is to provide an educational forum for members of MSGH to present clinical and scientific findings.

OBJECTIVE

To examine whether research presented at meetings reflects clinical practice and the rising trend of the disease in the field.

METHODS

Retrospective review of all available abstracts presented at MSGH meetings from 2004 to 2013 (abstracts were not available before 2003 and 2010 was excluded due to Asia Pacific Digestive Week) was performed and stratified based on several subcategories, source and university affiliations.

RESULTS

A total of 589 abstracts were presented at the meetings. Based on the sub-categories: benign upper GI disorders, predominantly *H. pylori* (21.2%), therapeutic and diagnostic endoscopies (16.1%), hepatology (12.2%), case reports (10.7%), community based project (9.2%), colorectal cancer (CRC) (5.6%), Inflammatory bowel disease (IBD) (3.9%), benign colorectal disease (3.7%), functional gastro-intestinal disorders (FGID) (2.7%), basic science (2.7%) and others (12%). The main contributors of the abstracts submission to GUT were Ministry of Health's hospitals (51.4%), University Malaya Medical Centre (16.2%), University Kebangsaan Malaysia Medical Centre (11.6%), University Sains Malaysia and University Putra Malaysia (6.8%) and other institutions (14%).

CONCLUSION

The major focus of research presented at the MSGH meetings over the last one decade were benign upper GI disorders (predominantly *H. pylori*), endoscopies, hepatology (predominantly hepatitis C) and case reports. Among the most under-represented sub-categories include CRC, IBD, FGID and basic science. The MSGH annual meetings provide an excellent forum for all the members. However, major focus of research should be shifted to the rising of colorectal cancer, common complaints (FGID), translational clinical and basic science.

PP 22

PREVALENCE OF INFLAMMATORY BOWEL DISEASE AMONG THE DIFFERENT ETHNIC GROUPS OF THE CENTRE REGION OF SARAWAK

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OBJECTIVE

To determine the prevalence of Inflammatory Bowel Disease in the different ethnic groups in the Centre Region of Sarawak and to define the disease severity among the population.

METHODOLOGY

Data from the medical records of patients with diagnosis of IBD, either admitted or follow up in Hospital Sibu, was retrieved using ICD 10 Category code K50-52 for the year 2009-2014.

RESULTS

A total number of 10 patients were diagnosed to have IBD by various means. 9 patients were diagnosed to have Ulcerative Colitis and 1 was diagnosed to have Crohn's Disease. Among all the cases, only 3 cases have histopathological confirmation. The highest prevalence was Malays followed by Chinese. The lowest prevalence was the Iban population. Emergency subtotal colectomy was performed for life threatening complications in 2 Iban patients (50%). One Malay patient had total colectomy done for persistent active colitis for more than 10 years. Joint involvement was found in 2 Iban patients (20%).

DISCUSSION AND CONCLUSION

The prevalence of IBD is low in the Centre Region of Sarawak. The Malay population has the highest prevalence, in contrast to previous studies on the different ethnic groups in Malaysia, as the ethnical distribution of Sarawak is different from the Peninsular Malaysia. The Ibans is the minority ethnic group in Malaysia, is the majority population resides in this region. The Iban population has the lowest prevalence but more severe disease. We attribute the reasons to delayed access to medical care and lack of expertise in diagnosis. The environmental factors and the genetic factors affecting the disease process in this population are yet to be explored.

RADIATION EXPOSURE AMONG INFLAMMATORY BOWEL DISEASE PATIENTS AT THE NATIONAL UNIVERSITY OF MALAYSIA MEDICAL CENTRE

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OBJECTIVES

Patients with inflammatory bowel disease (IBD) are subjected to an increased exposure to ionizing radiation during their illness. This makes their risk for malignancy greater than the already elevated risk for gastrointestinal malignancy due to the disease itself. When indicated, the use of low-radiation imaging protocols are recommended so as to reduce the cumulative effective dose (CED) of radiation exposure. However, lack of availability of resources in our country is a concern. We sought to identify radiation exposure and CED in our IBD cohort.

METHODS

We conducted a retrospective analysis of all imaging performed at our centre for patients with IBD. Radiation exposure was estimated using millisieverts (mSv) according to the American College of Radiology Guidelines for effective doses of diagnostic imaging.

RESULTS

A total of 83 IBD patients; 24 Crohn's Disease (CD) and 59 Ulcerative Colitis (UC) were studied. The CED for all IBD patients was 550.12 mSv (2.07 mSv/person/year, range 0 – 48.17) and the mean CED was 6.63 mSv/patient. Computed tomography (CT) scans accounted for 61% of the studies and the mean duration of follow up was 5.55 +/- 4.26 years.

For CD patients, total radiation was 3.10 mSv/person/year, the mean CED was 17.226 mSv/patient (range 0 - 96.34) and the mean duration of follow up was 2.92+/-1.86 years.

For UC patients, the total radiation was 0.348 mSv/patient/year, the mean CED was 2.316 mSv/patient (range 0 – 24.36) and the mean duration of follow up was 6.6 +/- 4.5 years.

CONCLUSION

IBD patients, notably CD patients were exposed to significant levels of radiation which was approximately twice that of background radiation at 1.5 mSV/person/year. Alternative imaging modalities such as ultrasonography or MR enterography should be used instead of CT where available and gastroenterologists along with gastrointestinal radiologists should consider low-radiation imaging protocols.

AN EVALUATION OF STAFF SATISFACTION AT THE ENDOSCOPY UNIT OF UKM MEDICAL CENTRE

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OBJECTIVES

Many surveys evaluating endoscopy services have been patient centered with less focus on perspectives of endoscopy staffs. Hence, we conducted a survey to evaluatethe satisfaction among staff working at the endoscopy unit at the UKM Medical Centre.

METHODS

The endoscopy unit consists of nurses, clerical staffs, attendants, assistant science officers, administrators, trainee endoscopists, junior doctors, endoscopy assistants and consultant endoscopists. The services are shared by hepatobiliary, upper GI, colorectal, vascular, respiratory and gastroenterology teams. We provided staff with a survey comprising questions about management of the unit and adequacy of training amongst others. The questionnaires were completed by each individual in private with forms deposited in a box at the registration counter. Responses were graded according to 4 scales with "Agree Strongly" and "Disagree Strongly" at extreme ends.

RESULTS

A total of 36 questionnaires were returned of which 63.8% were from the surgical department (7 hepatobiliary, 6 upper GI, 6 vascular, 5 colorectal), 30% were from nursing and assistant staff (4 nursing, 2 administration, 2 attendants, 3 assistant science officers), 5.4% of responses were from the gastroenterology team and none from the respiratory team.

The most favorable responses were safety and multidisciplinary team communication (mean +/- standard deviation 1.58 +/- 0.55 and 1.61 +/- 0.64 respectively). This corresponded to "Strongly Agree" and "Agree".

The lowest scores were for having a personal development plan and attending a training endoscopy course in the last 6 months (mean +/- standard deviation 2.05 +/- 0.62 and 1.94 +/- 0.89 respectively). This corresponded to "Agree and "Disagree".

CONCLUSION

The majority of endoscopy staff felt the unit was a safe working environment. Multidisciplinary teamwork and approachability of senior staff including consultants were also rated highly. The areas of potential improvement include structuring training for staff in order to enhance morale and encourage personal development plans.

PREVALENCE OF ANAEMIA AMONG IBD PATIENTS AT UKM MEDICAL CENTRE

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INTRODUCTION

Anaemia is the most common extra-intestinal manifestation of inflammatory bowel disease (IBD) and significantly affects quality of life. The prevalence of anaemia among Caucasian patients with IBD is estimated to range between 15 to 75% but for Asian patients with IBD it is currently unknown.

OBJECTIVES

We aimed to evaluate the prevalence of anaemia in our IBD cohort.

METHODS

A retrospective analysis of our IBD cohort was carried out with documentation of the haemoglobin (Hb) level at presentation, mean corpuscular volume (MCV), iron studies, transferrin saturations and number of units of blood transfused. Based on the World Health Organization definition, anaemia was defined as Hb< 12g/dl in women and Hb< 13g/dl in men. Iron deficiency anaemia (IDA) was defined as ferritin <30 ng/ml or transferrin saturations <16% as per ECCO guidelines.

RESULTS

A total of 83 IBD patients were identified with 24 (29%) having Crohn's Disease (CD) and 59 (71%) having Ulcerative Colitis (UC). A total of 49 (59%) patients had anaemia at presentation. 19/24 (79%) CD patients and 30/59 (50.8%) UC patients.

9/19 (47.3%) anaemic CD patients were male. The mean Hb levels for CD patients with anaemia was 9.92 +/- 1.89 g/dl (range 5 - 12.5) with average MCV of 74.5 fl. 6 patients (31.6%) had penetrating disease of which 4 (21%) had perianal involvement. 5 (26%) had stricturing disease.

12/19 (63%) anaemic CD patients had IDA (TSats 8% +/- 0.03). Iron studies were not available for the remaining 6 patients. Mean number of years of follow up was 2.89 during which 3.52 units (range 0 – 23) of blood were transfused per patient (1.29 units/year).

19/30 (63%) anaemic UC patients were male. The mean Hb levels for UC patients with anaemia were 10.60 +/- 1.67 g/dl (range 6.4 – 12.7) with average MCV of 80.1. 19 patients (63%) had severe disease (17 pancolitis, 2 extensive colitis).

8/30 anaemic UC patients had IDA (TSats 12% +/- 0.08). Iron studies were not available for the remaining 28 patients. Mean number of years of follow up was 6 during which 1.9 units of blood (range 0 – 9) was transfused per patient (0.50 units/year).

CONCLUSION

A large proportion (59%) of our IBD patients had anaemia at presentation. This was especially common with UC patients with extensive colitis and CD patients. Whilst iron deficiency was seen in the majority of anaemic CD patients, there were a large number of patients without iron studies or ferritin levels checked. Appropriate workup for all IBD patients should be carried out including B12, folate and iron studies to guide supplementation and thus reduce unnecessary transfusion and the associated risks.

A STUDY EVALUATING PATIENT SATISFACTION AT THE ENDOSCOPY UNIT OF UKM MEDICAL CENTRE

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OBJECTIVES

To assess the factors affecting patients' satisfaction and areas of potential improvement at the endoscopy unit of UKM Medical Centre

METHODS

We conducted a survey among in and out patients attending the endoscopy unit at the UKM Medical Centre from February to May 2014. A total of 14 questions consisting of waiting time to cleanliness of the unit were distributed and answered by the patients. Patients were given 5 options based on the validated Lickert scale to answer all the 14 questions with 'extremely dissatisfied' corresponding to level 1 and 'excellent' corresponding to level 5. Patients who were disorientated, unable to answer the questions due to underlying illness or required guidance and help from relatives to answer questions were excluded from the study.

RESULTS

A total of 100 patients participated but 4 had to be excluded due to incomplete data thus 96 questionnaires were analysed (75 outpatients, 21 inpatients). The mean score for all 14 questions was satisfactory at 3.77 +/- 1.61. The two highest mean scores were reported at 4.08 +/- 0.99 and 3.97 +/- 1.09 and were awarded for the cleanliness of the unit and the service provision by the staffs during treatment respectively. The lowest mean scores were waiting times at reception (3.37 +/- 1.21) followed by the waiting times prior to endoscopy (3.31 +/- 1.14).

CONCLUSION

This survey demonstrated that the endoscopy service provision by the staff along with the cleanliness of the endoscopy unit were regarded highly by our patients. However, the long waiting times at reception and prior to endoscopic procedures need improvement. This may reflect insufficient clerical staff, insufficient endoscopic rooms and complexity of endoscopic procedures (complicated procedures taking more time to perform).

PP 27

AN ASSESSMENT OF KNOWLEDGE AND COMPETENCY IN TRANSFUSION MEDICINE FOR GASTROINTESTINAL BLEED AMONG HOUSE OFFICERS

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OBJECTIVES

Gastrointestinal bleeding (GIB) is a potentially life threatening abdominal emergency and symptomatic anaemia almost always require urgent blood transfusion. Some of these patients may experience blood transfusion reactions. It is well known that House Officers (HOs) are amongst the first in line to attend for prescribing and administrating the blood products and also responsible to manage the case of blood transfusion reaction. Little is known about the knowledge and competency of transfusion medicine among all Hos. This study aims to assess the knowledge and competency of house officers in prescribing appropriate blood products to patients with GIB and various other diseases and also managing appropriate blood transfusion reactions.

METHODOLOGY

A cross-sectional study was done via convenience sampling to assess transfusion medicine knowledge amongst house officers at UKM Medical Centre. A 31 true-false questions, adapted from validated questionnaires published in a UK-based cohort study, were used to address knowledge in indications for transfusion (8 Qs), special blood requirements, (6 Qs), risks of transfusion (9 Qs) and laboratory practical guidelines (8 Qs). An overall score was given for each sample. Samples were marked for each correct answer and analyzed via SPSS 22 Software.

RESULTS

A total of 26 first-year HOs (10 males, 16 females; 10 local graduates and 16 overseas graduates) were assessed. The overall competency score (maximum score of 100) was similar between male and female HOs, with both genders giving a median of 42. The local and overseas graduates scored a median of 44 and 42 respectively. The HOs scored significantly low on special blood requirements, with a median of 33. In contrast, the UK first-year doctors achieved a score of 57 and 53 for overall competency score and special blood requirements respectively.

CONCLUSION

The first-year House officers, whether trained in Malaysia or abroad at the undergraduate level, have limited knowledge and competency in transfusion medicine in particular with regards to appropriately prescribing the right blood products. A regular group and clinical-based trainings are required to improve the knowledge and competency of transfusion medicine among house officers.

AWARENESS OF HEPATOCELLULAR CARCINOMA AMONG PATIENTS WITH CHRONIC VIRAL HEPATITIS ATTENDING GASTROENTEROLOGY CLINIC AT UNIVERSITY KEBANGSAAN MALAYSIA MEDICAL CENTRE (UKMMC)

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INTRODUCTION

Chronic Hepatitis B and C predispose to the development of hepatocellular carcinoma (HCC) The aim of the study was to determine the awareness of HCC among patients with chronic hepatitis B and C at UKMMC.

METHOD

This was a cross sectional descriptive study conducted at the gastroenterology clinic, UKMMC. Patients awareness were assessed with a modified validated questionnaire which was developed based on the health belief model. 172 questionnaires were distributed to Hepatitis B and C patients.

RESULTS

120 questionnaires were analyzed, of those, 94 (78.3 %) patients had hepatitis B, 22 (18.3 %) hepatitis C and 4 (3.3%) were not sure of their status. Half of the study cohort were between age 25 -54 (50.8%) with 46.7% achieving secondary education. 40.8% were unemployed, 24.2% had monthly income between RM1000-RM2999. Half of the participants, 62 (51.7%) depend on healthcare professionals for health information on hepatitis whilst 1/3 of participants chose social media. The mean score for knowledge of hepatitis and hepatocellular carcinoma in this study was 9.92 ±3.666 out of 17, which was thought to be poor given that the study was conducted amongst an urban cohort. Age ($r=-0.180$, $p=0.049$) had a significant negative correlations with knowledge of hepatitis and HCC. Education level ($F=5.272$, p value <0.001) and higher income group ($F=4.442$, p value=0.002) showed significant positive correlations with knowledge. Significant correlation between the participants age and perceived severity ($p = 0.017$, $r = 0.081$) and negative correlation to benefit of action ($p = 0.023$, $r = -0.207$) was noted. As for perception and knowledge, the participants only showed significant correlation between knowledge and benefits of action ($p = 0.000$, $r = 0.491$) and barrier to action ($p = 0.001$, $r = -0.301$). Respondents with better knowledge associated with better perception of benefits of actions and less barriers to action.

CONCLUSION

In our current local setting, healthcare professionals play an important role in patient education especially in the older age group. Improving perception and awareness of HCC in our population group is mandatory. More public forums / campaigns should be conducted to educate the older and lower education group. Regular screening according to recommended guidelines should be carried out among these particular group to enable early detection of HCC so that optimum treatment strategy can be instituted early.

BONE MINERAL DENSITY IN WOMEN WITH CHRONIC HEPATITIS C INFECTION IN CORK UNIVERSITY HOSPITAL, IRELAND

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OBJECTIVE

To study the bone mineral density (BMD) and osteoporosis rates in women with chronic hepatitis C infection.

METHODS

We identified a cohort of women exposed to Hepatitis C virus genotype 1B via contaminated anti-D administered in 1977. Patients were separated into two groups: 1) chronically infected with Hepatitis C (PCR+); 2) spontaneously cleared the virus with positive antibodies (PCR-). Reports of their dual energy x-ray absorptiometry (DEXA) scan were retrieved from medical records.

RESULTS

101 patients were identified of which 52 are PCR+ and 49 are PCR-. Mean age of PCR+ and PCR- are 63 (54-77) years and 63 (54-75) years respectively (p=0.861).

TABLE 1.Comparison of BMD, T-scores and Z-scores at Lumbar Spine between the PCR+ and PCR- groups.

	PCR + (n=52)	PCR - (n=49)	p-value
BMD (g/cm²)	1.026 (±0.115)	1.074 (±0.136)	0.058
T-score	-1.29 (±0.97)	-0.88 (±1.13)	0.052
Z-score	-0.102 (±1.03)	0.439 (±1.01)	0.009

10 out of 52 patients in the PCR+ group are known to have established liver cirrhosis.

TABLE 2. Comparison of BMD, T-scores and Z-scores at Lumbar Spine between the cirrhosis and non-cirrhosis groups within the PCR+ group.

	PCR + (n=52)	PCR - (n=49)	p-value
BMD (g/cm²)	1.034 (±0.120)	1.024 (±0.115)	0.813
T-score	-1.22 (±1.01)	-1.31 (±0.97)	0.801
Z-score	0 (±1.17)	-0.126 (±1.01)	0.732

The rate of osteoporosis is 9.6% in PCR+ and 4.1% in PCR- (p=0.253).

The rate of osteoporosis is 10% in the cirrhosis group and 9.5% in the non-cirrhosis group (p= 0.914).

CONCLUSIONS

There is no significant difference in rates of osteoporosis between PCR+ and PCR-; and between the cirrhosis and non-cirrhosis groups within the PCR+ subgroup. PCR+ has a significantly lower spinal Z-score compared to PCR-.

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AN AUDIT ON COLONOSCOPY FOR PATIENTS WITH UNEXPLAINED IRON DEFICIENCY ANEMIA (IDA). A SINGLE CENTER EXPERIENCE

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INTRODUCTION

Anemia is common in developing Asian countries and half of it is due to IDA. IDA commonly due to poor oral intake and chronic blood loss. The evaluation of Gastrointestinal(GI) tract is the standard of care in current practice of workout for IDA.

OBJECTIVE

An audit on all the colonoscopies done for the indication of unexplained IDA.

METHODOLOGY

A single center retrospective observational study. The endoscopic registry was the main source of information. The demographic detail and findings collected from registry.

RESULTS

The Endoscopic registry was started on Jun 2008. We reviewed all colonoscopy done for the indication of Unexplained IDA. A total of 10612 colonoscopies and 949 (8.94%) colonoscopies were done for the indication of unexplained IDA. Out of which 653(68.81%) patients had significant pathology that would be possible cause for the IDA and 296(31.19%) patients had normal colonoscopy. The findings were as follows, 75(7.9%) patients had colorectal carcinoma (CRC), 90(9.5%) patients had Diverticular disease, 32(3.4%) patients had colonic ulcers, 23(2.4%) patients had colitis, 10(1.0%) patients had telangiectasia, and 8(0.8%) patients had angiodysplasia and 1(0.01%) patient with melonosis-coli. About 240(25.3%) patients had polyps independent of other findings, however only 48 patients had polyp >9mm. About 149(15.7%) patients had hemorrhoids independent of other finds.

DISCUSSION

IDA caused by GI pathology is due to chronic blood loss. Therefore IDA is silent until patient become symptomatic due to anemia or the colonic pathology that caused anemia. In this review we noted that patient with IDA that underwent colonoscopy had both bleeding and non-bleeding pathology. We noted that 653(68.81%) patients had significant pathology. IDA is an alarm symptom for GI malignancy and in this audit we noted 75(7.9%) patients had CRC.

CONCLUSION

Patient with IDA with normal OGDS should undergo colonoscopy to complete GI workout.

SUSPECTED UPPER GASTROINTESTINAL BLEED IN PATIENTS WITH CHRONIC KIDNEY DISEASE: AN EVALUATION OF FAECAL OCCULT BLOOD TESTING AND UPPER ENDOSCOPY FINDINGS

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OBJECTIVES

Faecal occult blood testing (FOBT) is commonly performed prior to upper endoscopy (UE) for patients presented with suspected upper gastrointestinal bleeding (UGIB). However, the results of the FOBT and the findings of UE in the settings of chronic kidney disease (CKD) are somewhat conflicting.

We aim to evaluate the results of FOBT and the UE findings in various stages of CKD patients.

METHODOLOGY

Retrospective review of immuno-chemical based FOBT results and UE findings along with demographic details, haemoglobin (Hgb) levels in a cohort of CKD patients were conducted at the endoscopic unit, UKM Medical Centre from January to June 2014.

RESULTS

A total of 82 patients with various stages of CKD (45 males, 37 females, mean age of 63 years with age range of 19 – 86, mean Hgb level of 8.3g/dL with range of 3.2 – 12.7g/dL). There were 51% Malays, 44% Chinese and 5% Indians. Out of 82 FOBTs, 48 (58.5%) were positive and 39 (81.3%) of them revealed positive UGIB upper endoscopy findings: [severe gastritis, duodenitis, peptic ulcer disease, gastric erosions, esophageal varices, gastric antral vascular ectasia and angiodysplasia] and 9 (18.7%) had normal UE findings despite taking either warfarin or low dose anti-platelet agents.

A total of 34 (41.5%) FOBTs were negative but 25 (73.5%) had positive UE findings similar to the above finding (5 of them were on anti-platelet agents) and 9 cases had normal findings.

CONCLUSION

Upper gastrointestinal bleed is commonly occurred in patients with various stages of CKD which may possibly reflect on the platelet dysfunction in these patients. Urgent upper endoscopy is recommended in CKD patients suspected with UGIB regardless of the results of FOBT.

PP 32

A CASE REPORT – EOSINOPHILIC COLITIS IN A PATIENT WITH NORMAL COLONOSCOPY

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OBJECTIVE

We report a case of eosinophilic colitis in a patient presenting with chronic diarrhoea but had normal colonoscopy findings.

PRESENTATION

A 22 years old Indian lady presented to us with chronic non bloody diarrhoea of 3 months associated with abdominal pains. Her diarrhoea was occasionally severe with 4 to 5 episodes in a day. There were no other significant symptoms. She had no history of food allergies, eczema, allergic rhinitis or bronchial asthma. Colonoscopy showed normal mucosa till caecum. Random biopsies were taken from the colon for histopathological examination.

RESULTS

Histology of the rectum and sigmoid colon showed an inflammed lamina propria with mild to moderate infiltration by eosinophils (40-60 eosinophils per 100 epihelial cells count) and lymphoplasmacytic cells. This was in keeping with Eosinophilic colitis.

DISCUSSION

Eosinophilic colitis is a rare entity in the spectrum of primary eosinophilic gastrointestinal disorders (EGID). The pathophysiology is related to altered hypersensitivity, principally as a food allergy in infants or T lymphocyte mediated (non IgE associated) in adults. Colonoscopy may show an edematous mucosa and loss of normal vascular pattern. Histologic findings include sheeths of eosinophils in the lamina propria with extension through the muscularis mucosa into the submucosa.

CONCLUSION

A normal colonoscopy in these patients should be completed with random biopsies in symptomatic patients as this diagnosis may be missed.

PP 33

SUPERIOR MESENTERIC ARTERY SYNDROME IN A RETROVIRAL POSITIVE PATIENT

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CASE REPORT

We report a case of SMA (Superior Mesenteric Artery) syndrome presenting with abdominal pain, persistent vomiting and loss of weight.

PRESENTATION

A 21 year old male patient diagnosed with Retroviral disease with low CD4 counts of 18 was started on anti retro viral therapy consisting of Tenofovir 300mg daily and Efavirenz 600mg daily. After 3 months of starting treatment he developed progressive abdominal pain, vomiting and loss of weight.

RESULTS

Abdominal CT scan showed a dilated proximal duodenum with tapering at the 3rd part as it passes between the aorta and the superior mesenteric artery. Upper G.I endoscopy showed a dilated duodenum (1st and 2nd part) with narrower 3rd part of duodenum.

DISCUSSION

SMA Syndrome was first described in 1871 and is characterised by compression of the third part of the duodenum as a result of arteriomesenteric compression. It has an incidence of 0.1 to 0.3 %. The SMA usually forms an angle of between 38 to 56 degrees between the abdominal aorta. Any narrowing of this angle till 6 to 25 degrees can cause narrowing of the third part of duodenum. CT scan diagnosis can be demonstrated when the angle between the abdominal aorta and the superior mesenteric artery falls below 22 degrees.

CONCLUSION

SMA syndrome is a recognised but rare condition that requires a high index of suspicion and early treatment. This would prevent complications such as malnourishment and intestinal obstruction.

PP 34

TRENDS OF PEG TUBE INSERTION IN HOSPITAL KUALA LUMPUR – A 5-YEAR EXPERIENCE

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OBJECTIVE

To evaluate the indications, complication rates and replacement PEG tubes over the past 5 years in our hospital.

METHODOLOGY

Retrospective analysis of data obtained from the MGIR (Malaysian gastro intestinal registry) system. Data on Peg tube insertion were taken from year 2009 till 2014.

RESULTS

Total number of cases were 207. Out of this number 66% (137) were males and 34% (70) were females. Majority of the case referrals were for Replacement tubes 62% (128), new cases 36% (75) and 2% (4) for removal. Majority of the cases (146) were performed on patients above the age of 50 years while the remaining 61 cases were on those below 50 years old. Highest indication for new cases came from Cerebro Vascular Accident (34), Intra Cranial pathologies (14) , ENT or GI Malignancies (15), Oesophageal stricture (6) and Motor Neuron Disease (5). In the Replacement group 66% were for dislodged tube, 24% for blocked tube, 6% for leaking and 4% for infected tubes. No immediate complications were noted.

DISCUSSION

PEG tube feeding is a widely used method for nutritional support in patients unable to feed normally due to debilitating illnes. There are a wide variety of indications from both medical and surgical patients. There were no immediate complications in our patients the past 5 years. The majority of replacement tubes were done due to poor care of the PEG tube at home.

CONCLUSION

PEG tube is a safe method of nutritional delivery in patients requiring it after careful evaluation of the goals to be achieved. A proper and thorough evaluation and explanation to the care givers after insertion is equally important to ensure its objectives are met.

IRRITABLE BOWEL SYNDROME AND OVERLAP WITH FUNCTIONAL DYSPEPSIA AND GASTRO-ESOPHAGEAL REFLUX ARE COMMON AMONG MEDICAL AND PHARMACY STUDENTS IN MALAYSIA

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OBJECTIVES

Across Asia, based on Rome III criteria, the prevalence of irritable bowel syndrome (IBS) among medical students can range 28.3 – 35.5% but data on overlap with functional dyspepsia (FD) and gastroesophageal reflux disease (GERD) are not available. The current study aimed to examine for prevalence of IBS using Rome III criteria and its overlap with FD and GERD as well as its relationship with anxiety, stress and depression among medical and pharmacy students in Malaysia.

METHODS

Medical students in their clinical years and pharmacy students at a private medical school (CUCMS, Malaysia) were invited to take part in the study. Rome III questionnaires (IBS and FD), GERDQ and Depression Anxiety and Stress 21-items (DASS-21) were administered to all consented students. The overlap between IBS with FD and IBS with GERD and the association of IBS with anxiety, depression and stress were analyzed using Chi-square/Fisher-exact or t-test where appropriate. Multivariable analysis was performed to determine the predictors for IBS in this population.

RESULTS

With a respondent rate of 85%, a total of 206 students (F/M 126/80, mean age 23 years, medical students 60.7%) were eventually analyzed. Based on the Rome III criteria, 29.1% (60/206) had IBS (F/M 35/25), with IBS-M (58.3% or 35/60), the commonest variety. FD was present in 36.7% (22/60) of students with IBS, P = 0.004 and GERD (score ≥ 8) was present in 23.3% (14/60) of students with IBS, P = 0.02. Students with vs. without IBS are more anxious (78.3% vs. 60.3%, P = 0.01) and stressful (55.0% vs. 37.0%, P = 0.02) but are not more depressed (55.0% vs. 47.9%, P = 0.4). With logistic regression analysis, of factors significant in univariable analysis which were then included in the forward: LR model (age, academic year; 3rd or 5th year, smoking status and medication status), the most predictive of IBS was academic year 3 (OR 3.6, 95% CI 1.8-7.5, P < 0.001) but current smoking (OR 0.2, 95% CI 0.06-0.9, P=0.03) and taking medications (OR 0.08, 95% CI 0.02-0.3, P<0.001) are protective.

CONCLUSIONS

IBS symptoms are prevalent among Malaysian students in a private medical institution, and IBS is commonly overlapped with FD and GERD. Students with IBS are more anxious and stressful. Being in academic year 3 appears to be associated with IBS and current smoking and taking medications are protective mechanisms.

PP 36

PRIMARY GASTROINTESTINAL TUMOUR OF PROSTATE: A CASE REPORT

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INTRODUCTION

Gastrointestinal Stromal Tumours (GIST) arises in mesenchymal cells of the GI tract which originates from the intestinal cells of Cajal that serves as immunomodulator of the digestive tract. An estimated incidence of occurrence is 1.5/100,000/year. The primary GIST arising from prostate is rare. Review of literature revealed 20 cases of GISTs occurring in prostate either primary or more commonly as rectal neoplasms extending to the prostate.We report a case of GIST of the prostate in a 56 year old man, presenting with constipation and urinary retention. The diagnosis of prostate GIST was confirmed by histological and immunohistochemistry. Our case report emphasize on the important of inclusion of GIST in the differential diagnosis of every spindle cells encountered in the prostate.

CONCLUSION

To our knowledge GIST that are located outside the GI Tract is extremely rare.

PP 37

CHOLANGIOCARCINOMA IN A DOWN SYNDROME PATIENT: A CASE REPORT

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BACKGROUND

Cholangiocarcinoma is a rare tumour with overall incidence about 1:100 000 people per year. Down Syndrome is one of the most common chromosomal disorders with the occurrence of 1 in 700 live births. There are multiple studies representing Down syndrome and its association with benign and malignant neoplasms. We present a case of Cholangiocarcinoma in a 33 year old Malaysian lady of Indian ethnicity with underlying Down Syndrome, diagnosis established based on clinical presentation and CT findings.

DISCUSSION

The occurrence of cancer in Down's syndrome is unique with a high risk of haematological malignancies in children and a decreased risk of solid tumours in all age-groups. The distinctive pattern of malignant diseases may provide clues in the search for leukaemogenic genes and tumour-suppressor genes on chromosome 21. The mechanism is mainly genetic, but differences in exposure to exogenous agents compared with the general population must be kept in mind. These findings are of interest for the management of these patients and early detection of cancers.

CONCLUSION

Cholangiocarcinoma in Down Syndrome is a rare condition. Better knowledge of this tumor profile could help us to understand the mechanisms of carcinogenesis and should be compared to the current knowledge of genes on chromosome 21, to aid in early detection and further management.

PP 38

AN AUDIT OF COLONIC POLYP FROM ENDOSCOPIC REGISTRY. SINGLE CENTER EXPERIENCE.

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BACKGROUND

In Malaysia Colorectal cancer (CRC) is the third commonest cause of cancer. Over 90% of CRC cases arise from a non-obligate precursor such as colonic polyps(CP).

OBJECTIVE

To audit on the colonoscopy registry to study the incidence and characteristics of CP.

METHODOLOGY

A Single center retrospective observational study. All adult colonoscopy with CP done from 2012 till 2014 was reviewed. The patient's demography and the characteristic of the CPs were reviewed.

RESULTS

A total of 4983 colonoscopies performed from 2011-2014 for various indications. Out of which 1044(21%) had CP. The median age 61(range26-90), male vs female [663(64.5%) vs 381(35.5%)] and age >55 years 832(79.7%) were predominantly male. The CP detection in Chinese 430(41.2%), Malay 372(35.6%), Indian 233(22.3%) and other races10(0.01%). The distribution of CP in rectum 328(31.4%)patients, sigmoid-colon 264(25.3%)patients, descending-colon 224(21.5)patients, transverse-colon 190(18.2%), ascendending-colon 215(20.6)patients and ceacum116(11.1%)patients and terminal-ileum 8(0.01)patients. Based on types, sessile-CP 634(60.7%), pedunculated-CP(short stalk) 274(26.2%), pedunculated-CP(long stalk55(0.05%) and flat-CP200(19.2%). The CP size <9mm vs >9mm, 784(75%) vs 260(25%).

DISCUSSION

About 80% of CRC develops from adenomatous CP. We noted that the detection of CP increases with age. The CP detection were more in male and this explains our current knowledge that CRC is the most commom malignancy in male worldwide. Most of the CP distributed to the left colon. More Chinese patient had CP compared to other ethnic groups. In keeping with the Asian statistics that Chinese population has high incidence of CRC.

CONCLUSION

This audit denotes strongly that the frequency of CP detection based on demography and location of CP is very much similar to incidence of CRC. Therefore surveillance colonoscopy is important to reduce the risk of CRC. There were significant numbers of CP detected during the colonoscopies done for other indications.

COLORECTAL CANCER SCREENING IN KOTA STAR AND KUALA MUDA, KEDAH

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Colorectal cancer (CRC) is the second commonest cancer in Malaysia. According to NCPR colorectal cancer, majority of the patient present at late stage, almost three quarter falls in Stage 3 and 4. Hence mortality and morbidity are not favourable. Screening will be the most logical way to improve the outcome of colorectal cancer. Primary objective 1) Pilot study of CRC screening using iFOBT in detecting precancerous and CRC (notably early stage) among asymptomatic adults aged between 50-70 years, in local primary health clinics in Kota Star and Kuala Muda. Secondary objective is to assess the implementation of the screening program. Asymptomatic individuals aged of 50-70 from two districts in Kedah Kota Star and Kuala Muda were invited to participate using iFOBT test kit between May-December 2013. Subjects were counseled at 16 primary health clinics. Posters and advertisement on CRC screening via local radio were made prior to the start of the program. Participants need to return the stool specimen with the kit within 48hours at their nearest health clinic. Second kit was given if the first sample was negative. Colonoscopy was offered to the positive stool sample. Total of 1096 participants took part in the study. 71 specimens (6.5%) revealed positive, 136 (12.4%) failed to return the kit, and 867 were negative (79.1%) in first round collection. 22 sample positive (2.5%) on the second round of stool collection, 648 (74.7%) were negative and remaining 197 did not return the kit. Only 61participants with positive test underwent colonoscopy, the remainder 32 refused colonoscopy. The finding of colonoscopy as followed, normal (18%), adenoma (29.5%), cancer (3.3%) and others (49.2%). Colorectal cancer screening using iFOBT test was positive (6.5% among the first round of stool collection and additional 2.5% on second collection). About a third of those underwent colonoscopy revealed of precancerous and cancerous CRC. The uptake was low indicating the need for more awareness among public. High percentage of participants refused colonoscopy and significant proportion of participants did not return the second sample.

PP 40

IBD REGISTRY IN MALAYSIA – A BABY IN THE CRADLE

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BACKGROUND

The incidence and prevalence of IBD in Malaysia is low but the true figure remains unknown. The IBD Registry is set up in order to better understand the disease pattern among our population and hopefully be able to provide us with the true incidence rate in future.

METHOD

Participating Hospitals include most of tertiary Hospitals in KKM and few University base Hospitals. Data were captured via a set of questionnaires filled up by attending doctors. All patients (existing as well as new patients) that are being actively followed up from Jan 2013 were included. Various variables pertaining to demography, disease pattern and treatment modality were analyzed.

RESULT

There were 149 patients in Crohn's database. Of this 55% (82) male and 45% (67) female. Ethnic distribution: 37% (55) Indian, 33% (49) Malay, 23% (34) Chinese and 7% (11) others. Mean age of the cohort was 33.45 years and mean age at presentation was 27.12 ± 14.15 years. Main presenting complaints were abdominal pain (77.7%), diarrhea (70.9%), weight lost (49%) followed by PR bleeding (33%), fever (14.2%), fistula (10.1%), intestinal obstruction (4.1%) and abscess (2%). Of this, 42.2% had ileocolonic involvement, 33% colonic and 21.8% ileal disease. 10.6% had concomitant upper GI disease but there was no isolated upper GI disease. The most common phenotype is non-stricturing non penetrating disease (32.4%) followed by stricturing (25%) and penetrating disease(26.4%). 6.8% had concomitant perianal disease. 9.5% had skin and joints as extra intestinal manifestation. 78.1% were on Azathioprine , 54.8% on 5-ASA while 25.4% on biologics for maintenance of remission .

For Ulceratice colitis, there were 302 patients in the data base. Of this 44% (133)female and 56% (169) male. Ethnic distribution: 42% (124) Malay, 31% (94) Indian, 23% (70) Chinese, 4% (12) others. Mean age of the cohort was 49.99 years and mean age at presentation was 40.59 ± 14.52 years. Diarrhea (78%), PR bleeding (75.2%) and abdominal pain (48%) were the main presenting complaint. Left sided disease constitutes about 71.52% followed by pancolitis (25.82%). 92.2% are on 5 ASA to maintain remission followed by Azathioprine (38.7%). Biologics are infrequently used (2.5%). Extra intestinal manifestation occurs infrequently in which skin at 5.6% and joints 3%.

CONCLUSION

There are more Ulcerative colitis patients than Crohn's disease patients in the database with the latter showing younger age of presentation. From observation, IBD is more frequently observed in Indian ethnicity. As the Registry is still in its infancy state it will take more effort and years before the true incidence and prevalence rate can be obtained.

PP 41

COLORECTAL CARCINOMA: DOES SMOKING AFFECT ITS PROGNOSIS?

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INTRODUCTION

Smoking has been associated with an increased risk of colorectal carcinoma incidence. With the increasing number of smokers in this country, proportion of smoker with colorectal carcinoma is also on the rise.

OBJECTIVES

The aim for this study was to study association between smoking and survival prognosis of colorectal carcinoma.

METHODOLOGY

Colorectal carcinoma cases registered under Malaysian National Colorectal Carcinoma Registry from year 2007 until 2013 was retrieved and analyzed retrospectively. Survival of colorectal carcinoma for different smoking status was analyzed with simple and multiple Cox regression.

RESULTS

Among 2690 colorectal carcinoma patients, 454(16.9%) were active smokers, 570(21.2%) were former smokers and 1666(61.9%) were non-smoker. Multiple Cox regression revealed that smoking is significantly associated with colorectal carcinoma prognosis (p value: 0.040) after controlling other factors. Adjusted Hazard ratio for active smoker was 1.42 (95% CI 1.08;1.85) with p value 0.011 as compared to non-smoker. The 3-years and 5-years survival rate for active smoker vs non-smoker were 49.9% vs 57.2% and 39.7% vs 49.7% (p value <0.001). On the contrary, adjusted Hazard ratio for former smoker was 1.10 (95% CI 0.85;1.42) as compared to non-smoker (p value: 0.483).

DISCUSSION/CONCLUSION

Active smoking is associated with increased risk of colorectal cancer mortality. Otherwise, colorectal carcinoma prognosis is not significantly different between former smoker and non-smoker.

PP 42

INTESTINAL OBSTRUCTION: PREDICTOR OF POOR PROGNOSIS IN COLORECTAL CARCINOMA?

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INTRODUCTION

Intestinal obstruction is one of the complications that generally associated with poor prognosis among colorectal cancer patients. Long term survival rates presumed to be poorer for patients who have obstruction at the time of diagnosis, but no systematic analysis been performed before.

OBJECTIVES

The aim for this study was to study association between intestinal obstruction and survival prognosis of colorectal carcinoma.

METHODOLOGY

This study was retrospective and assessing all data from National Colorectal Cancer Registry from 2007 until 2013. We examined the proportion of intestinal obstruction in colorectal carcinoma patients and comparing the prognosis between colorectal carcinoma with or without intestinal obstruction.

RESULTS

Total of 4892 patients included in the analysis with 527 (10.8%) patients were found to have intestinal obstruction. 3 years and 5 years survival rate for patients with intestinal obstruction were 47.3% and 36.5% as compared to without intestinal obstruction group with 55.1% and 46.3% respectively. The survival rate for colorectal carcinoma patients with intestinal obstruction was significantly shorter than those without the symptoms (p value: 0.002). Furthermore, the analysis shows that intestinal obstruction was significantly associated with colorectal carcinoma prognosis with adjusted Hazard ratio was 1.29 with p value 0.033.

DISCUSSION/CONCLUSION

Intestinal obstruction is significantly associated with poorer prognosis among colorectal carcinoma patients.

COLORECTAL CARCINOMA: SURVIVAL DURATION BY STAGE OF CARCINOMA

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INTRODUCTION

Survival duration for colorectal carcinoma patients is different due to their presentation and diagnosis. Early detection may prolong patient survival rate.

OBJECTIVE

The aim of this study was to determine survival prognosis for different stages of colorectal carcinoma.

METHODOLOGY

The study was retrospective and assessing all data from National Colorectal Cancer Registry during 2007 till 2013. We examined the survival duration (in 3 years and 5 years) between different stages of carcinoma.

RESULTS

The overall five-year relative survival of colorectal cancer patients in Malaysia was 42.7%. There was, however, substantial variation by the stage of disease at diagnosis. 77.1% of patients diagnosed with the earliest stage of disease survived five-years from diagnosis compared to only 17.8% of those with advanced disease (stage IV) which has spread to other parts of the body at diagnosis (p-value <0.001). In addition, survival rate was significantly associated with all initial presenting symptoms of colorectal carcinoma.

DISCUSSION/CONCLUSION

Early detection of colorectal carcinoma at earliest stage significantly prolonged patient 5 years survival rate.

PP 44

ECONOMIC EVALUATION OF HEPATITIS C MANAGEMENT IN HOSPITAL SULTANAH BAHIYAH

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BACKGROUND

Hepatitis C virus (HCV) has been a burden to the health care systems worldwide.

OBJECTIVES

To determine the economic burden of hepatitis C management from local payer's perspective.

METHODS

A cross-sectional retrospective study was conducted on patients who had completed their hepatitis C anti-viral treatment and those receiving palliative care from 2010 to 2013. In addition, anti-viral treatment arm was subdivided into Pegasys® and Pegintron® group for cost-effectiveness analysis (CEA). The total costs calculated included the cost of medications, personnel, diagnostic laboratory tests, diagnostic imaging, blood transfusion and hospitalization.

RESULTS

Of 108 patients screened, only 61 (56.5%) had met the inclusion criteria and were recruited. 73.8% had received a regimen containing the combination of peginteferon injection (Pegasys® or Pegintron®) and ribavirin (Copegus® or Rebetol®) for a variety of treatment duration, ranging from 9 to 42 weeks while 26.2% were receiving palliative care. Medications (88.3%) had taken up the largest portion of the expenditure, followed by laboratory tests (7.4%) and personnel (2.6%). Cost/patient treated with Pegasys® + Copegus® and Pegintron®+ Rebetol® was RM 27668.58 and RM 26241.28 respectively. Cost-effectiveness ratio (CER) for Pegasys® group was RM 37389.98/patient while CER for Pegintron®group was RM 43018.50. Incremental Cost-Effectiveness Analysis (ICER) calculated is RM 10979.23 per successful treatment.

CONCLUSIONS

The total cost of hepatitis C treatment per patient in a Malaysian general hospital is RM20,477.08. In the treatment of Hepatitis C, the use of Pegasys® + Copegus® combination is more cost effective than Pegintron®+ Rebetol® with the ICER of RM10979.23. A review should be done on the medication usage as it constituted the highest proportion of the cost.

PP 45

AN AUDIT ON ENDOSCOPIC BAND LIGATION FOR ESOPHAGEAL VARICES IN DISTRICT HOSPITAL

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OBJECTIVE

Variceal haemorrhage is defined as bleeding from an esophageal or gastric varix at the time of endoscopy or the presence of large esophageal varices with blood in the stomach and no other recognisabke cause of bleeding. Endoscopy varicel ligation(EVL) is a crucial step along with initial resuscitation. EVL widely used to prevent esophageal varices bleeding in patient with liver cirrhosis.

METHODOLOGY

A retrospective study was conducted over period 12month in year 2013. Study groups were patients presented with 1st onset of esophageal varices bleeding(in patients) and whom was followed up for eradication therapy.

RESULTS

Total number of patients underwent EVL are 117 with 88 male and 29 female. 70 patient aged <60yrs, 42 aged 60-79yrs and 5 are >80yrs old. 90% of the patient presented with systolic bp>100 with pulse rate of>100, 5% of them with systolic bp of<90 and another5% was normotensive. 85% of the patients noted to have grade II-III esophageal varices and the remaining were grade I varices.

DISCUSSION

Risk scoring system adapted from Rockall risk scoring and Glascow-blatchford scoring system taken as marker to optimize the patient and also as assessment tool for EVL within 24hrs in patient. The average mortality of the first episode of variceal bleeding in most studies is 50%. As this mortality from variceal hemorrahage is related closely to severity of liver disease. Avarage mortality over subsequent variceal haemorrahage 5% in child class A,25% in child B and 50% in child C. 80% of EVL patient with child B-C has been followed for eradication therapy thus along along with pharmoacological therapy reduces grade 2-3 varices to grade 1.

CONCLUSION

EVL effective in preventing variceal bleed. Although small risk of band-induced bleeding, this rate is low in comparison with the predicted rate of variceal bleeding.

PP 46

RESOLUTION OF HEPATOCELLULAR CARCINOMA FOLLOWING SORAFENIB THERAPY – CASE REPORT

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BACKGROUND

Hepatocellular carcinoma (HCC) usually presented late. Prognosis depends mainly on size of lesions, involvement of portal veins, Child-Pugh (CP) score and performance status. We report a case of advance, inoperable Barcelona Clinic Liver Cancer (BCLC) C hepatocellular carcinoma with CP score A that survives following Sorafenib therapy.

CASE PRESENTATION

A 63-year-old woman presented with complaint of vague abdominal pain, nausea, fatigue and general malaise for 1-month duration. She was not known to have viral hepatitis nor any liver disease prior to this. Clinically she appeared very lethargic. She was not pale nor jaundice. Abdominal examination revealed enlarged liver, 6cm below the costal margin and no ascites. Blood investigations showed hemoglobin 16g/dl, platelet 200 x 109 IU/ml, total bilirubin 18umol/L, albumin 40 g/L, alanine aminotransferase 71 IU/L, international normalization ratio (INR) 1.1, alpha-fetoprotein (AFP) 101,506 IU/L and anti-HCV antibody was positive. CT liver 5-phase revealed a right lobe liver lesion (segment V & VIII) measured 7.5 x 8.0 cm consistent with HCC, no portal vein thrombosis. Surgery and radiofrequency ablation was not possible. Trans-arterial chemo-embolization was offered but patient did not keen to proceed. Sorafenib was initiated at 400mg twice daily. She developed several side effects; low-grade fever but later subsided, minimal rash on and off and diarrhea, which were controlled with medication. AFP level at week 10, 12, 16 and 32 dropped tremendously to 652, 206, 19 and 5 respectively. CT liver 5-phase at week 24 showed complete tumor necrosis with evidence of complete response. Subsequent follow-up CT scan up to 4 years since Sorafenib was initiated showed stable disease with no evidence of recurrence and AFP remain below 3 IU/L. She is currently asymptomatic with good performance status. She received a total 30 weeks of Sorafenib treatment.

DISCUSSION

Sorafenib is a multi-kinase inhibitor, which is effective in advance HCC. Sorafenib Hepatocellular Carcinoma Assessment Randomised Protocol (SHARP) trial showed that median survival and time to radiologic progression of patients on Sorafenib are up to 3 months compared to placebo, only 2% had partial response and none had complete response. To our knowledge, only 3 cases were reported to achieve complete response to Sorafenib so far and our case is the longest survival recorded.

KEYWORDS

Sorafenib, complete response, survival, advance hepatocellular carcinoma

PP 47

A CREATIVE TREATMENT TO TREATING EARLY BURIED BUMPER SYNDROME

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Buried bumper syndrome (BBS) occurs if a percutaneous endoscopic gastrostomy (PEG) tube bumper becomes embedded within the gastric mucosa, which is usually a slow and progressive process. BBS is best identified early to allow manipulation of the button, thereby preventing closure of gastro-cutaneous tract and peritonitis. We present an innovative technique for the treatment and management of early BBS in which manual adjustments have failed. An oesophagogastroduodenoscopy (OGD) is undertaken under sedation via a 12mm endosscope (Olympus) to assess the patency of the tract in the gastric mucosa. Then, a 9mm nasoendoscope (Olympus) is inserted through the existing PEG tube to pass through the external tube, acting as a guide for bumper readjustment. The endoscope is pushed without resistance into the stomach cavity via the existing tract. Gentle manipulation with rotational movements enables the bumper to be re-introduced into the stoma cavity. A safe distance of 5 mm is left internally and flushing used to demonstrate good flow. The were no peri or post procedural complication encountered. The patient able to use the PEG tube for a duration of six months as required with no complications and successful removal of tube then after. The endoscope provides real-time imaging for guidance, thereby ensuring patient safety by preventing mucosal trauma through 'blind' manipulation. Moreover, the procedure is carried out in the outpatient setting, avoiding invasive surgical intervention. This technique allows for the salvage of PEG tubes, especially in 'developing' countries, where they are not readily replaceable due to the financial constraints placed upon patients.

PP 48

CHEMOPROPHYLAXIS IN HEPATITIS B PATIENTS WITH HEMATOLOGICAL MALIGNANCY RECEIVING CHEMOTHERAPY IN HOSPITAL AMPANG

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OBJECTIVES

The objectives of this study are to review the pattern of practice of chemoprophylaxis in hepatitis B patients who received chemotherapy for hematological malignancy in Hospital Ampang including the rate of hepatitis B flare, hepatitis E antigen seroconversion and resistance.

METHODOLOGY

This is a retrospective study which include the patients treated from January 2008 till June 2014. All patients were screened and identified through pharmacy database on antiviral prescription (lamivudine, tenofovir, telbivudine and entecavir). Subsequently, patients' clinical informations were retrieved via the hospital computer database.

RESULTS

A total of 159 patients were included with 151 patients received lamivudine as primary chemoprophylaxis and 4 patients on entecavir, 3 patients on tenofovir and 1patient on telbivudine. For patient on lamivudine, 14 patients were HbeAg positive (9.3%), 40 were HbeAg negative (26.5%) and others 97 were unknown/ not available(64.2%). Only 2 out of the 14 (14.3%) patient's seroconverted. For those on lamivudine, 15 patients (10%) developed hepatitis flare and 8 of them succumbed (53.3%). All the patients receiving tenofovir, telbivudine and entecavir were HbeAg negative and none of them developed hepatitis flare or its complication.

DISCUSSION

Meta-analysis has shown lamivudine chemoprophylaxis before and until 6 months after completion of chemotherapy reduced 91% of hepatitis B reactivation which is consistent with this study. This study also showed that tenofovir and entecavir is more effective in preventing hepatitis flare. 9 out of the 15 patients (60%) who flared only had their antiviral prophylaxis 1 to 2 months after commencement of chemotherapy. Another 4 patients developed flare due to non-compliance and the other 2 are due to lamivudine resistance and failure to complete the 6 months antiviral respectively. The HbeAg seroconversion rate among lamivudine patients on chemotherapy was also lower.

CONCLUSION

Antiviral prophylaxis for hepatitis B patients receiving chemotherapy is important and effective.

OUTCOME OF PEG-INTERFERON ALPHA AND RIBAVIRIN USE IN TREATMENT OF HEPATITIS C IN HOSPITAL AMPANG FROM 2007-2013

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OBJECTIVES

To assess the clinical effectiveness of Peg-interferon alpha and ribavirin for the treatment of Chronic Hepatitis C in Ampang Hospital

METHODS

Systematic evaluation and analysis of case notes of all chronic Hepatitis C patients treated with Peg-interferon alpha plus Ribavirin from January 2007 to December 2013. Demographic data and response towards treatment was then analyzed.

RESULTS

A total of 55 patients were treated during this period, of which 41 patients (75%) were male and another 14 patients (25%) were female. The mean age was 45 years. The racial distribution of the patients recruited were Malay = 35 (64%), Chinese = 17 (31%), Indians = 2 (4%) and Others = 1 (1%).

HCV genotype distribution was as follows:

Genotype 1 n=16 (29%)
Genotype 2 n=1 (2%)
Genotype 3 n=38 (69%)

Sustained Virological Response (SVR) achieved was 50% in Genotype 1 and 76% in Genotype 3. There were no significant difference between the co morbidities and response to treatment (p=0.339). The relapse rates were 3% for Genotype 1 and 15% for Genotype 3 patients. There was no relapse noted in Genotype 2.

CONCLUSION

We concluded that Peg-interferon alpha plus Ribavirin was useful in the treatment of our patients with Hepatitis C. SVR achieved in in HCV Genotype 1 and 3 were almost consistent with current data.

NOTES

NOTES