ANNUAL SCIENTIFIC MEETING OF THE MALAYSIAN SOCIETY OF GASTROENTEROLOGY AND HEPATOLOGY

GUT 2012

DATE
29th June 2012 to 1st July 2012

VENUE
Holiday Inn Melaka
Malaysia

souvenir programme & abstract book
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**MSGH Committee 2011 – 2012**

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<td>Dr Ramesh Gurunathan</td>
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<td>President Elect</td>
<td>Prof Sanjiv Mahadeva</td>
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<td>Immediate Past President</td>
<td>Dr L Sanker V</td>
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<td>Hon Secretary</td>
<td>Dr Ong Tze-Zen</td>
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<td>Dr Sheikh Anwar</td>
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It gives me great pleasure to welcome all of you to GUT 2012. This year, we have the pleasure of organising this event in the historical city of Malacca. Dr Tan Huck-Joo and Professor Dato’ Goh Khean-Lee have come up with an interesting scientific programme to benefit all delegates. We have many eminent faculty speakers from abroad and from our shores. Professor Richard Kozarek from the USA, will give the 12th MSGH Oration, and Professor Emad El-Omar from the United Kingdom, will deliver the 9th Panir Chelvam Memorial lecture.

The past year has been an eventful year for the MSGH and I would like to thank the committee for an excellent job. We had a successful Asian Pacific H. pylori Monothematic Meeting early this year, followed by our popular Endoscopy Workshop at the University Malaya Medical Centre. Other various significant meetings and seminars were also held throughout last year and this year which I hope has been of great benefit to our members and non-members.

Please take some time to also visit the interesting places of Malacca and to soak in its historical culture and delicacies.

Dr Ramesh Gurunathan
Richard Kozarek graduated with a MD degree in 1973 from the University of Wisconsin, having earlier obtained a BA degree in Philosophy in 1969 from the same University. He trained in gastroenterology in the Veteran’s Administration Medical Center - Phoenix, University of Arizona, obtaining his certification as a gastroenterologist in 1979. From 1983, he has worked continuously in the Virginia Mason Medical Center, Seattle, Washington, rising through the ranks from staff gastroenterologist to become the Chief of Gastroenterology from 1989 to 2005. From 2004, to 2008, he was also the Director of GI Research and from 2004, the Director of the Digestive Disease Institute at the Virginia Mason Medical Center. He has also held the position of Clinical Professor at the University of Washington since 1990. Through his efforts, the Virginia Mason GI clinic is recognised as one of the best GI centers in the world today.

Professor Kozarek has an outstanding clinical and academic record. His forte has always been in therapeutic endoscopy where he has performed and developed numerous pioneering procedures especially in esophageal and pancreatobiliary diseases. He is also a renowned and well-loved teacher. Over the years, not only he has tirelessly taught, mentored and guided a whole generation of therapeutic endoscopists chiefly from the USA, but from all over the world as well.

In a career spanning 30 years, Dr Kozarek has contributed over 400 scientific papers, invited reviews, and editorials, over 80 book chapters and seven books to the medical literature on topics ranging from therapeutic endoscopy, inflammatory bowel diseases and practice economics. He has presented over 300 original papers at scientific meetings, and has been invited to deliver numerous plenary or state-of-the-art lectures.

Richard Kozarek has contributed immensely to the medical and gastroenterology fraternity. He is a past president of the ASGE (American Society of Gastrointestinal Endoscopy) and also the 2005 recipient of the ASGE’s highest honor, the Schindler Award. He has also held numerous high ranking and leadership positions including being chair of the DDW council from 1997-1998. Most recently, he was President of the World Gastroenterology Organization from 2009-2011, a position that he served with characteristic honor and distinction.

In his illustrious career, Professor Kozarek has received numerous awards including the Eddy D Palmer Award for Gastrointestinal Endoscopy, William Beaumont Society 1982, and Teacher of the Year, Virginia Mason Medical Center 1984-1985, and James Tate Mason Award for the Outstanding Virginia Mason Medical Center physician 1992. The highest award was, without doubt, the Rudolf Schindler Award for lifetime contributions and service to gastrointestinal endoscopy from the ASGE in 2005.

Professor Kozarek is a man with the highest integrity and honor. When one meets Richard Kozarek for the first time, one is struck immediately by his warm personality and by the sincerity and humility in his demeanor. In the role of a mentor and a teacher, Richard Kozarek has always lent a helping hand and advice to younger colleagues in the GI and medical fraternity.

Richard Kozarek is happily married to Linda, his wife of 35 years, and they are blessed with two grown-up daughters, a dentist who is getting married this summer in Los Angeles, and an architect. A true family man, Richard Kozarek is a devoted father and husband and also still takes care of his parents and mother-in-law! He loves gardening and working in his own “backyard” and is an avid reader - fiction, history and biographies.

It is my singular privilege and honor to introduce to you, the Malaysian Society of Gastroenterology and Hepatology Orator for 2012 - Professor Richard Kozarek.
This year's prestigious Panir Chelvam Memorial Lecture will be presented by Professor Emad El-Omar from the United Kingdom. Professor El-Omar is a consultant gastroenterologist from the University of Aberdeen and also the Editor-in-Chief of GUT.

Professor El-Omar had his early education at Davies College in England, and higher education at the University of Glasgow in 1981-1988. He obtained his BSc in Pathology in 1986, MB ChB in 1988 and MRCP in 1991. He was awarded with honours and Bellahouston Medal in 1995 for his work on H. pylori. He continued to excel in his work with further awards in his illustrious career which include the “Best Research prize at the European H. pylori workshop” in Brussels, Young Investigator Award from the American Association for Cancer Research in 2000, and “The Joseph Sung Lecture and Medal” in Hong Kong.

Professor El-Omar started his post registration appointment at the Western Rotational Training Program in Glasgow in 1989. His appointments include a full-time research fellow, lecturer in Medicine and gastroenterology in the University of Glasgow, visiting scholar to the Department of Medicine, Vanderbilt University Medical Center, Nashville, USA, visiting scientist, Division of Cancer Epidemiology and Genetics, National Cancer Institute, Bethesda, Maryland, and his current appointment as a Professor of Gastroenterology and Honorary Consultant Physician at the University of Aberdeen and Grampian University Hospitals, Aberdeen, Scotland, which he has held since July 2000.

Professor El-Omar holds various fellowship and membership of professional societies not only in the United Kingdom but also in the USA. He has a hectic clinical, academic and research programme focused on role of chronic inflammation in GI disease, particularly malignancy. He has also established a novel programme looking at the role of chronic inflammation in sporadic colorectal neoplasia. In addition, his unit has established a database on IBD patients over three decades. He also has a very impressive international collaboration which spans over five continents which involves studies on gastric cancer and H. pylori. He has been Editor-in-Chief of GUT since January 2010, and also on the editorial board of six other journals. He has vast publications in well-reputed journals.

Professor El-Omar is married with six children and spends his spare time with them. They prefer outdoor activities which include hill walking and exploring mountains. His weekends are spent cooking, alongside his children and gardening which is another passion.

It is an honour for the Malaysian Society of Gastroenterology and Hepatology to have Professor El-Omar to present the 9th Panir Chelvam Memorial Lecture for this year.
### Programme At A Glance

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<td>S5 Case Discussion</td>
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<td>L3 12&lt;sup&gt;th&lt;/sup&gt; MSGH Oration</td>
<td>L5 9&lt;sup&gt;th&lt;/sup&gt; Panir Chelvam Memorial Lecture</td>
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<td>1100 - 1220</td>
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<td>Best Paper Award Presentations</td>
<td>S3 Hepatocellular Carcinoma</td>
<td>S6 Morbid Obesity</td>
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<td>1220 - 1300</td>
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<td>Faculty Dinner (By Invitation only)</td>
<td>MALAYSIA NIGHT</td>
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Daily Programme
Day 1  •  29th June 2012, Friday

0730 - 1630  Registration

0830 - 0910  L1  STRAITS BALLROOM EAST
CHAIRPERSONS: ANDREW CHUA SENG-BOON / SANJIV MAHADEVA
Is functional dyspepsia a psychosomatic disorder? [pg 31]
JAN TACK

0910 - 0950  L2  STRAITS BALLROOM EAST
CHAIRPERSONS: SHASHI KUMAR MENON / S MAHENDRA RAJ
HCC screening – Why this is important and what I recommend in clinical practice [pg 32]
MORRIS SHERMAN

0950 - 1030  L3 : 12th MSGH Oration  STRAITS BALLROOM EAST
CHAIRPERSON: RAMESH GURUNATHAN
Minimally invasive/interventional gastroenterology: Where have we been? Where are we going? [pg 33]
RICHARD KOZAREK
CITATION: GOH KHEAN-LEE

1030 - 1100  Tea

1100 - 1220  Best Paper Award Presentations [pg 51-56]  STRAITS BALLROOM EAST
COORDINATORS: TAN HUCK-JOO / MAZLAM ZAWAWI

1220 - 1300  Lunch Satellite Symposium 1 [Janssen]  STRAITS BALLROOM EAST
CHAIRPERSON: TAN HUCK-JOO
Prucalopride – A new drug for the treatment of chronic constipation
JAN TACK

1300 - 1430  Lunch / Friday Prayers

1430 - 1550  S1 : Case Discussion  STRAITS BALLROOM EAST
CHAIRPERSONS: SOON SU-YANG / JIN BONG
HCC
RAVI MOHANKA, HAN KWANG-HYUB, JINSIL SEONG, MORRIS SHERMAN,
JOSE DECENA SOLANO, WONG KA-TAK, JIN BONG

1550 - 1630  L4  STRAITS BALLROOM EAST
CHAIRPERSONS: IDA HILMI / HAMIZAH RAZLAN
The use of nutraceuticals in chronic liver disease: Myths, facts and dangers [pg 34]
FRANCESCO MAROTTA

1630 - 1730  Tea Satellite Symposium [TMA]  STRAITS BALLROOM EAST
Valuation of liver fibrosis: US elastography vs MR elastography
LEE JONG-MIN

1730 - 1800  Tea

1800 - 1900  MSGH Annual General Meeting  STRAITS BALLROOM EAST

1930 – 2200  Faculty Dinner (By Invitation only)
Daily Programme
Day 2 • 30th June 2012, Saturday

0730 – 0820
Meet-the-Expert Breakfast Sessions
1. What do the top GI journals look for? [pg 35]
   **EMAD EL-OMAR**
   MODERATORS: SOON SU-YANG / IDA HILMI
2. Endoscopy for GI bleed – State-of-the-art and future possibilities
   **JAMES LAU**
   MODERATORS: QUA CHOON-SENG / LEONG CHOON-KEONG
3. When do you refer for liver transplant?
   **RAVI MOHANKA**
   MODERATORS: JIN BONG / SANJIV MAHADEV

0830 – 0950
S2 : Gastrointestinal Bleed
[Supported by an educational grant from AstraZeneca]
CHAIRPERSONS: P KANDASAMI / JAYARAM MENON
Asia Pacific Working Group consensus on non-variceal upper gastrointestinal bleeding [pg 36]
**JAMES LAU**
Radiological treatment in difficult cases [pg 36]
**WONG KA-TAK**

0950 – 1030
L5 : 9th Panir Chelvam Memorial Lecture
CHAIRPERSON: TAN HUCK-JOO
Role of chronic inflammation in GI cancer [pg 37]
**EMAD EL-OMAR**
CITATION: RAMESH GURUNATHAN

1030 – 1100
Tea

1100 – 1220
S3 : Hepatocellular Carcinoma
[Supported by an educational grant from Bayer HealthCare]
CHAIRPERSONS: GOH KHEAN-LEE / OOI ENG-KEAT
A multimodal approach to the treatment of HCC [pg 37]
**HAN KWANG-HYUB**
Treatment hepatocellular carcinoma with sorafenib [pg 38]
**MORRIS SHERMAN**
Innovative role of radiotherapy in treatment of hepatocellular carcinoma [pg 39]
**JINSIL SEONG**
Liver transplantation for HCC [pg 40]
**RAVI MOHANKA**
Daily Programme
Day 2 • 30th June 2012, Saturday (cont’d)

1220 – 1400

Lunch Satellite Symposium 2 [Eisai]
CHAIRPERSON: GOH KHEAN-LEE
Refactory GERD: Diagnosis and treatment in 2012
JOSE DECENA SOLLANO

Lunch

1400 – 1440

L6
CHAIRPERSONS: KEW SIANG-TONG (Mrs) / ONG TZE-ZEN
Assessment of liver steatosis and fibrosis - Why is it important in the treatment of chronic liver disease [pg 41]
HENRY CHAN

1440 – 1630

S4: Management of Severe Acute Pancreatitis
CHAIRPERSONS: AKHTAR QURESHI / MOHAMAD NAZIM SALLEH
Risk assessment and prognostication of severe acute pancreatitis [pg 42]
D N REDDY
A multi-modal approach in severe pancreatitis [pg 43]
RICHARD KOZAREK
Surgery in acute pancreatitis - When do you intervene and how? [pg 44]
JIN BONG
Nutritional timing and optimization in acute pancreatitis [pg 45]
FRANCESCO MAROTTA

1630 – 1730

Tea Satellite Symposium [Invida]
CHAIRPERSON: AKHTAR QURESHI
Baveno V International Consensus in the treatment of portal hypertension
Y HORSMANS

1730 – 1800

Tea

1930 – 2200

MALAYSIA NIGHT
GUT2012

Daily Programme
Day 3 • 1st July 2012, Sunday

0730 – 0820

Meet-the-Expert Breakfast Sessions

   HENRY CHAN
   MODERATORS: HAMIZAH RAZLAN / TEE HOI-POH

5. Fibroscan – An alternative for liver biopsy?
   SANJIV MAHADEVA
   MODERATORS: PANG CHOK-WANG / SHEIKH ANWAR

   SHAW SOMERS
   MODERATORS: NIK RITZA KOSAI / ONG TZE-ZEN

0830 – 0950

S5 : Case Discussion

CHAIRPERSONS: NIK RITZA KOSAI / P KANDASAMI
Complicated GERD
SHAW SOMERS, LAWRENCE HO, JOSE DECENA SOLLANO

0950 – 1030

L7

CHAIRPERSONS: SHEIKH ANWAR / AHMAD SHUKRI MD SALLEH
New endoscopy-based therapies for malignant biliary stricture [pg 47]
D N REDDY

1030 – 1100

Tea

1100 – 1220

S6 : Morbid Obesity

CHAIRPERSONS: RAMESH GURUNATHAN / CHUAH SEONG-YORK
Epidemiology and consequences of morbid obesity [pg 48]
LAWRENCE HO
Endoscopic treatment of morbid obesity [pg 49]
D N REDDY
Surgery for obesity [pg 50]
SHAW SOMERS

1220 – 1400

Lunch

ESSENSE KITCHEN
Moderators / Chairpersons

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

Akhtar Qureshi  
Sunway Medical Centre, Petaling Jaya, Selangor

Jin Bong  
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur

Chuah Seong-York  
Hospital Pantai, Ayer Keroh, Melaka

Andrew Chua Seng-Boon  
Ipoh Specialist Centre, Ipoh, Perak

Goh Khean-Lee  
University Malaya Medical Centre, Kuala Lumpur

Hamizah Razlan  
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur

Ida Hilmi  
University Malaya Medical Centre, Kuala Lumpur

Jayaram Menon  
Hospital Queen Elizabeth, Kota Kinabalu, Sabah

Kew Siang-Tong (Mrs)  
International Medical University, Seremban, Negeri Sembilan

Leong Choon-Keong  
Hospital Pantai, Ayer Keroh, Melaka

Mazlam Zawawi  
Ampang Puteri Specialist Hospital, Ampang, Selangor

Mohamad Nazim Salleh  
Damasana Specialist Centre, Petaling Jaya, Selangor

Nik Ritza Kosai  
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur

Ong Tze-Zen  
KPJ Kajang Specialist Centre, Kajang, Selangor

Ooi Eng-Keat  
Gleneagles Hospital, Penang

P Kandasami  
International Medical University, Kuala Lumpur

Pang Chok-Wang  
Pang Specialist Medical & Gastro Clinic, Melaka

Qua Choon-Seng  
Mahkota Medical Centre, Melaka

Ramesh Gurunathan  
Sunway Medical Centre, Petaling Jaya, Selangor

Sanjiv Mahadeva  
University Malaya Medical Centre, Kuala Lumpur

S Mahendra Raj  
Pantai Medical Centre, Kuala Lumpur

Shashi Kumar Menon  
Hospital Kuala Lumpur, Kuala Lumpur

Sheikh Anwar  
Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur

Soon Su-Yang  
Timberland Medical Centre, Kuching, Sabah

Tan Huck-Joo  
Sunway Medical Centre, Petaling Jaya, Selangor

Tee Hoi-Poh  
Kuantan Hospital, Kuantan, Pahang
EMAD EL-OMAR

Professor Emad El-Omar graduated MB ChB from Glasgow University in 1988, having obtained an intercalated BSc (Hons) degree in Pathology in 1986. He trained in General Medicine and Gastroenterology in Glasgow and gained dual accreditation in both, in 1997. In 1995, he was awarded the degree of MD with honours and Belahouston Medal, for his work on the effect of H. pylori infection on gastric acid secretion in man. In 1997, Professor El-Omar moved to the USA to carry out research on the role of bacterial and host genetic factors in the pathogenesis of gastric cancer. He spent one year in the Division of Infectious Diseases at Vanderbilt University School of Medicine, Nashville, Tennessee, and two years at the Division of Cancer Epidemiology and Genetics, National Cancer Institute, NIH, Bethesda, Maryland. In July 2000, Professor El-Omar took up the newly created Chair of Gastroenterology at Aberdeen University. He is also an Honorary Consultant Physician with the Grampian University NHS Trust. Professor El-Omar leads a dedicated team of basic and clinical scientists studying the pathogenesis of gastrointestinal malignancies and the role of chronic inflammation in cancer. Professor El-Omar was elected Fellow of the Royal College of Physicians of Edinburgh in 2001, and Fellow of the Royal Society of Edinburgh in 2007. He is currently the Editor-in-Chief of the Gut journal. His main research interest is the role of microbial-induced inflammation in GI cancer and inflammatory bowel disease.

HAN KWANG-HYUB

Professor Han Kwang-Hyub is Professor of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea. He is also the Chief of Liver Cancer Specialist Clinic at the Severance Hospital, and of the hospital’s Division of Gastrointestinal Section of Internal Medicine, and staff gastroenterologist (hepatologist). He is also a professor of internal medicine at the University’s College of Medicine. His research interest includes hepatocellular carcinoma and viral hepatitis. He is the Director and principal investigator of a 9-year project, “Clinical Research Center for Liver Cirrhosis,” granted from the Ministry of Health and Welfare and Health Technology Planning and Evaluation Board. He was the Chairman of Academic Committee, Korean Association for the Study of the Liver. He is also the Director of Planning Board, Korean Association of Internal Medicine, Director, Liver Cirrhosis Clinical Research Center, Governing board member of International Liver Cancer Association (ILCA). He was also a member of working party, Asian-Pacific consensus statement on the Management of Hepatocellular Carcinoma 2008. He is presently an Associate Editor of Journal of Gastroenterology and Hepatology. Professor Han has more than 160 publications in peer-reviewed journals.
Faculty Bio-Data

JIN BONG

Dr Bong Jin-Jin graduated from the University of Leeds in 1996, and later in 2004, was awarded the degree of Doctorate of Medicine (MD) for the research thesis. He received specialist surgical training at the prestigious Northwest Thames (London Deanery) Program. After completing his specialist training in general and hepatobiliary surgery, he continued his fellowship training at the Hammersmith Hospital, London, United Kingdom.

Dr Bong was appointed Associate Professor (Academic) at the Universiti Kebangsaan Malaysia in 2009. Dr Bong has published 23 papers in peer-reviewed journal, many of which were of original research in high-impact journals. Dr Bong specialised in complex hepato-biliary and pancreatic surgery, and established the first laparoscopic hepatectomy programme at the National University of Malaysia (UKM).

HENRY CHAN LIK-YUEN

Professor Henry Chan Lik-Yuen is Professor in the Department of Medicine and Therapeutics, Director of Cheng Suen Man Shook Center for Hepatitis Research, Director of the Center for Liver Health, and Head of the Liver Unit in the Institute of Digestive Disease of the Chinese University of Hong Kong.

Professor Chan graduated from the Chinese University of Hong Kong and obtained his degree in Doctorate of Medicine with commendation. He has been President of the Hong Kong Association for the Study of Liver Diseases from 2005 to 2009. He is Editor for the Journal of Gastroenterology and Hepatology and sits on the editorial boards of Clinical Gastroenterology and Hepatology, Alimentary Pharmacology and Therapeutics, World Journal of Gastroenterology, Gut and Liver, Open Drug Discovery Journal and Hong Kong Medical Journal.

Professor Chan is a key investigator in several international trials on antiviral treatment of chronic hepatitis B and C, and sits on the advisory boards of Bristol-Myers Squibb, F Hoffmann-La Roche, Abbott Diagnostics, Merck and Novartis Pharmaceuticals Corporation. He has received numerous research awards including a young scientist award by the Association of Southeast Asia Institutions of Higher Learning and Scopus and he was selected as one of the Ten Outstanding Young Persons in Hong Kong in 2008. He has published more than 200 peer-reviewed papers and is among the top 1% most cited scientists under Clinical Medicine in the Institute for Scientific Information (ISI).
LAWRENCE HO KHEK-YU

Professor Lawrence Ho is currently Professor of Medicine; Chair, University Medicine Cluster; Head, Department of Medicine; Head, Department of Gastroenterology & Hepatology, Clinical Director of the Endoscopy Centre, National University Health System, Singapore. He graduated with first class honours from the University of Sydney, and undertook his training in therapeutic endoscopy and endoscopic ultrasound at the Brigham and Women’s Hospital, and Hospital of the University of Pennsylvania, USA. His major research interest relates to innovative GI endoscopic technology. He has held four patents in endotech products. As co-inventor for the ground-breaking technology of the Master and Slave Transluminal Endoscopic Robot (MASTER), he was part of the team who developed the world’s first flexible robotic endoscopy system, which was successfully used to perform endoscopic submucosal dissection in human patients in 2011.

In collaboration with Harvard University & Genomic Institute of Singapore, he and the team has made important strides in the cloning of oesophageal stem cells from patients with Barrett’s oesophagus. This represents a fundamental breakthrough for understanding the nature of intestinal metaplasia and its role in the origins of upper GI cancers. In pursuit of bringing together regional experts with collaborative research in Barrett’s oesophagus and endoscopic ultrasound, Professor Ho is also the current Chair of the Asian Barrett’s Consortium and the Asian Consortium in EUS. He has published >130 SCI papers, >10 book chapters, and co-edited two books. His other academic achievements include being the Associate Editor of Digestive Endoscopy, and Editorial Board Members of Gut, Journal of Gastroenterology and Hepatology, and many others. He was President of Gastroenterological Society of Singapore in 2005-2006. In 2010, he was conferred the JGH Foundation Emerging Leadership lecturer in APDW2010. In recognition of his pursuit of innovation in medicine, he was awarded the Inaugural National University Health System Leadership Award - Clinical Innovator (Individual) Award in 2011.

RICHARD KOZAREK

Professor Richard Kozarek completed his gastroenterology fellowship at the University of Arizona-Phoenix VA Medical Center in 1978. He has been a member of the Section of Gastroenterology at Virginia Mason Medical Center since 1983, serving as Chief of GI for 15 years and currently as the Executive Director of the Digestive Disease Institute, as well as Clinical Professor of Medicine at the University of Washington since 1990.

In a career spanning 35 years, Professor Kozarek has contributed over 350 scientific papers, invited reviews, and editorials, 100 book chapters, and eight books to the medical literature on topics ranging from therapeutic endoscopy, inflammatory bowel diseases and practice economics.

A past president of the ASGE (American Society of Gastrointestinal Endoscopy), he received its highest honour, the Rudolph Schindler Award in 2005. He is currently on the Executive Committee of the World Gastroenterology Organization where he is the Immediate Past-President. He is also the Immediate Past-President of The Society for Gastrointestinal Intervention.
JAMES Y W LAU

Professor James Lau is Professor of Surgery, Department of Surgery, Prince of Wales Hospital, The Chinese University of Hong Kong. Dr Lau trained with Professor Sydney Chung in therapeutic endoscopy, upper GI and laparoscopic surgery. He then became a fellow in vascular surgery at the Royal Infirmary Edinburgh and returned to Hong Kong to lead the vascular surgical service at the Prince of Wales Hospital. Dr Lau’s research interests include therapeutic endoscopy and treatment of bleeding peptic ulcers. His publications led to a MD thesis in 2001 discussing the role of different treatment modalities in the management of bleeding peptic ulcer disease. Professor Lau has published more than 10 book chapters and 100 papers in peer-reviewed international medical journal.

FRANCESCO MAROTTA

Professor Marotta is one of the world’s leading researchers on probiotics and human health. After his graduation from Catania University with MD (cum Laude) in 1981, he joined the University of Chicago as a visiting fellow in gastroenterology. Two years later, he was selected by South African Education Ministry to serve as registrar at the University of Cape-Town, Groote Schuur Hospital. He is the first Italian to obtain a PhD from the University of Hirosaki, Japan, with entire curriculum in Japanese. He later received a Fellowship from the Japanese Science & Technology Ministry to continue his studies at the National Cancer Center in Tokyo. Upon returning to Italy, he was appointed as Chief Consultant in Gastroenterology at S Anna Hospital, Como, Italy, and then as Consultant at Hepato-Gi Unit, S Giuseppe Hospital Milano, Italy. He is also Consulting Professor at WHO-affiliated Center for Biotechnology and Traditional Medicine, Department of Anatomy, University of Milano, Consulting Professor of BioGerontology, Urology Department, University of Pavia and Visiting Professor at many Japanese Institutions. For 10 years, he had directed a research center in Japan and cooperated with Nobel Prize Professor Luc Montagnier. He is Editor and Board Member of over 25 PubMed-listed medical journals. Board Certified as Expert in Age-Management Medicine by Cenegenics Medical Institute, USA. He has received several international prizes, the last being the Genomic Pioneer Award 2009. Co-founder of the research group ReGenera which is working on an innovative model of preventive/regenerative medicine. He has co-edited a successful book on aging-intervention and some book chapters on probiotics and vitamins. He has published 135 papers and presented 400 communications. He is also Editor-in-Chief of International Journal of Probiotics and Prebiotics.
RAVI MOHANKA
Dr Ravi Mohanka is a Senior Consultant at the Medanta Institute of Liver Transplantation and Regenerative Medicine, Gurgaon, Haryana, India. He is a hepato-biliary and abdominal multi-organ (liver, kidney, pancreas, intestinal) transplant surgeon with experience in both adult and paediatric transplantation, including complex procedures such as multi-visceral transplantation. He started his training in Transplant surgery at the Indraprastha Apollo Hospital in New Delhi before moving on to become the Post-Doctoral Clinical and Research fellow in Transplant Surgery, University of Rochester Medical Centre, New York. He then worked at the prestigious Thomas E Starzl Transplantation Institute at the University of Pittsburgh. He has presented and published his research work at many scientific meetings and international journals and also delivered faculty lectures in many meetings. His research interests are long term outcomes, transplant immunology, liver regeneration, bio-artificial liver, stem cell therapy for liver failure and abdominal tumours.

NIK RITZA KOSAI
Dr Nik Ritza Kosai is the current Head of Upper GI, Obesity and Metabolic Unit at the National University Malaysia Medical Centre. He obtained BScMed from the University of St Andrews, Scotland, followed by MBChB from the University of Manchester, England, in 1995. He underwent and completed Basic and Higher surgical training in the Northwest of England at leading hospitals including Manchester Royal Infirmary, Salford Teaching Hospital, Royal Liverpool Children’s Hospital, leading to FRCS (General Surgery), in 2008. His main interest is in Endoscopic and Minimally Invasive Surgery in which he performs Laparoscopic Hernia, Upper GI, Lower GI and Bariatrics including complex revisional procedures. He is also currently a Certified Trainer for the CCrISP (Care for the CriticallyI ll in Surgical Patients), Royal College of Surgeons of England. He has published in local and international journals and currently a reviewer for the international journal of medicine and journal of surgical academia.

D NAGESHWAR REDDY
Dr Nageshwar Reddy is currently the Chairman of Asian Institute of Gastroenterology, Hyderabad, India. He graduated from the Kurnool Medical College obtaining Internal Medicine Masters in Madras Medical College and DM in Gastroenterology from the Post Graduate Institute of Medical Education and Research (PGIMER) in Chandigarh. He subsequently worked as a Professor of Gastroenterology in Andhra Pradesh Health Sciences before setting up the Asian Institute of Gastroenterology, a tertiary care Gastrointestinal Specialties Hospital. His main area of research interest is GI Endoscopy particularly in Therapeutic Pancreatic Biliary Endoscopy and Innovations in Transgastric Endoscopic Surgery. He has published over 170 papers in national and international peer-reviewed journals, contributed chapters in seven international textbooks of Gastroenterology and has edited three GI Endoscopy textbooks. He is on the Editorial Boards of a number of journals including Gastrointestinal Endoscopy, Digestive Endoscopy and World Journal of Gastroenterology. He was the President of the Society of Gastrointestinal Endoscopy of India in 2001. He has been a visiting faculty for 112 international endoscopy workshops and a forum member of Asian Endoscopy Masters Forum. In recognition of his contribution to endoscopy, he was awarded the Master Endoscopist Award from the American Society for Gastrointestinal Endoscopy in 2009.
SANJIV MAHADEVA
Professor Sanjiv Mahadeva is currently Professor of Medicine at the University Malaya Medical Centre. A graduate of University of New Castle, Professor Sanjiv received his postgraduate training in Internal Medicine and Gastroenterology in Leeds, United Kingdom. His work on functional dyspepsia leads to an MD degree from the University of Leeds, United Kingdom. One of the most prolific researchers in Malaysia, Professor Sanjiv has published widely. He is currently President-Elect of the Malaysian Society of Gastroenterology and Hepatology and President of the Parenteral & Enteral Nutrition Society of Malaysia.

JINSIL SEONG
Jinsil Seong studied at Yonsei University and graduated in 1983. Following this, she was trained in Severance Hospital for her internship as well as residency in department of radiation oncology. She was further trained as a fellow in Severance Hospital. She spent 1.5 year in MD Anderson Cancer Center in Houston, Texas, to study laboratory research in 1990-1992. In 1992, she became an instructor in Yonsei University Medical College followed by promotion to Assistant Professor and finally to Professor in 2004. She received her PhD degree in Medical Science in 1993. During her professional career, she had second chance to study in MD Anderson Cancer Center between 1995 and 1996. She served as a department chair from 2005 to 2008 and serves now as a Clinical Director in Yonsei Cancer Center. She serves as an Editorial Board in International Journal of Radiation Oncology Physics Biology, which is the highest impact journal in radiation oncology field. She also serves actively as a reviewer in many international journals. From 2005, she participates in International Atomic Energy Agency as a Consultant.

Professor Seong has been given many national and international awards including Japanese Society of Hepatology International Conference, International Congress of Liver Disease. She published 159 peer-reviewed scientific papers including 68 SCI-listed ones. Her research interest is "Radiotherapy of HCC" in clinical approach as well as in translational research.

MORRIS SHERMAN
Dr Morris Sherman graduated in Medicine from the University of Witwatersrand in Johannesburg, South Africa in 1972, and completed his initial training in Internal Medicine at Baraqwanath Hospital in Soweto. Dr Sherman obtained his Internal Medicine qualifications in 1976 and completed his Internal Medicine training at Groote Schuur Hospital, Cape Town, South Africa. He undertook training in Gastroenterology and Liver Disease at Groote Schuur Hospital and then completed a PhD in 1982 in the Liver Research laboratory of the University of Cape Town. In 1982, Dr Sherman undertook a 2-year Post Doctoral Fellowship at the Albert Einstein College of Medicine in New York. Dr Sherman joined the Toronto General Hospital as a Staff Gastroenterologist in 1984.

Dr Sherman is currently Chairman of the Canadian Viral Hepatitis Network and President of the Canadian Association for Study of the Liver. His major interests are chronic viral hepatitis and hepatocellular carcinoma.
SHAW SOMERS

Mr Shaw Somers has been an NHS Consultant Surgeon since 1996, and specialises in Upper Gastrointestinal surgery. Before this, he was a Senior Lecturer and Honorary Consultant at St James’ University in Leeds and Associate Professor at The Prince of Wales Hospital in Hong Kong.

His bariatric surgical training started in 1994 in Leeds with Stephen Pollard, one of the UK’s first obesity surgeons. Since 1998, he has provided an NHS obesity service to the South of England, initially at King Edward VII Hospital in Midhurst and subsequently, at St Richard’s Hospital in Chichester. He now practices at centres around the South of England. He has experience of over 2500 bariatric operations including over 1400 gastric bypasses, 700 gastric bands and 400 complex or revision procedures. His mortality rate is exemplary (less than 0.2%) despite operating on patients of extreme size and with severe associated illnesses. In addition to being a recognised trainer in Bariatric Surgery and a council member of the British Obesity Surgery Society, he has a strong academic pedigree with over 30 peer-reviewed publications. He is also an honorary reader in Surgery at the University of Portsmouth.

JOSE DECENA SOLLANO

Professor Jose D Sollano is Professor of Medicine at the Faculty of Medicine and Surgery of the University of Santo Tomas, Manila, Philippines. He is Past Chairman of the Department of Medicine, St Luke’s Medical Center and School of Medicine William H Quasha Memorial and is currently the Chief of Gastroenterology and Endoscopy at the Cardinal Santos Medical Center.

Professor Sollano has been a Past President of the Asia Pacific Association for the Study of the Liver, Hepatology Society of the Philippines, Philippine Society of Gastroenterology and Digestive Endoscopy, and the Philippine College of Physicians. Professor Sollano is a key opinion leader in Asia and has been involved in various Asian-Pacific Consensus Management Guidelines development. His major interests include chronic hepatitis B, portal hypertension and new therapies for hepatocellular carcinoma. He has published several original scientific works, and is a member of the editorial board and/or reviewer of several international journals in the field of gastroenterology, endoscopy and hepatology.

SOON SU-YANG

Dr Soon Su-Yang graduated from the University of Nottingham in 1992. He then received his basic and higher training in Internal Medicine and Gastroenterology in some of the best hospitals in the United Kingdom, including King’s College Hospital, London, Guy’s and St Thomas Hospital, London. He was then appointed Consultant Gastroenterologist at the Kuching Specialist Hospital and Sarawak General Hospital. His research interest is in inflammatory bowel disease.
JAN TACK

Professor Jan Tack is currently Head of Clinic in the Department of Gastroenterology, Professor in Internal Medicine and Chairman of the Department of Clinical and Experimental Medicine at the University of Leuven, Leuven, Belgium. He is a Founding Staff Member of TARGID, the Translational Research Center for Gastrointestinal Disorders, at the University of Leuven.

He graduated summa cum laude in 1987 from the University of Leuven and specialised in internal medicine and gastroenterology at the same institution. A research fellow at the Department of Physiology at the Ohio State University, Columbus, Ohio, USA, from 1989 to 1990, he has been a research fellow at the Center for Gastroenterological Research at the University of Leuven since 1990. Professor Tack’s research lies in the field of neurogastroenterology and motility, and includes diverse topics such as the physiology and pharmacology of the enteric nervous system, GI hormones, intestinal inflammation and the pathophysiology of functional dyspepsia, gastro-esophageal reflux disease and the irritable bowel syndrome. Professor Tack is in charge of a large translational research group and has published more than 400 articles and 40 book chapters on various aspects of scientific and clinical gastroenterology.

Professor Tack won several awards for Basic and Clinical Research in GI Science. Professor Tack is President of the International Society for Diseases of the Esophagus. He has served as (Associate) Editor for Gut, Gastroenterology, Neurogastroenterology and Motility and Digestion and serves or has served, as a member of the Editorial Board of Gastroenterology, American Journal of Gastroenterology, Alimentary Pharmacology and Therapeutics, Journal of Gastroenterology, Journal of Internal Medicine and Bailliere’s Best Practice and Research in Clinical Gastroenterology.

WONG KA-TAK

Dr Wong graduated from the Medical School of the Chinese University of Hong Kong in 1995. He received his fellowship in Radiology in 2000, currently working as Consultant Radiologist and Honorary Associate Professor in Department of Imaging & Interventional Radiology, Prince of Wales Hospital, The Chinese University of Hong Kong. His special interests include non-invasive cardiovascular imaging and interventional radiology. He has published more than 80 peer-reviewed scientific papers and as Co-Editors in four Radiology textbooks.
MSGH ANNUAL SCIENTIFIC MEETINGS
AND
ENDOSCOPY WORKSHOPS

The proud tradition of the

Malaysian Society of
Gastroenterology and Hepatology
<table>
<thead>
<tr>
<th>Event</th>
<th>Faculty</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult ERCP- &quot;The Master's Approach&quot;</td>
<td>Kees Huibregtse (Amsterdam, The Netherlands)</td>
<td>19th August 1993</td>
</tr>
<tr>
<td>Endoscopic Ultrasonography</td>
<td>TL Tio (Washington, USA)</td>
<td>26th July 1994</td>
</tr>
<tr>
<td>ERCP- &quot;Basic Skills, Finer Points and New Techniques&quot;</td>
<td>Kees Huibregtse (Amsterdam, The Netherlands)</td>
<td>25th August 1994</td>
</tr>
<tr>
<td>Practical Points in Therapeutic Endoscopy</td>
<td>Nib Soehendra (Hamburg, Germany)</td>
<td>6th December 1994</td>
</tr>
<tr>
<td>Therapeutic Endoscopy Workshop (In conjunction with Island Hospital Penang, Malaysia)</td>
<td>Nib Soehendra (Hamburg, Germany) Kees Huibregtse (Amsterdam, Netherlands)</td>
<td>22nd July 1997</td>
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<td>Lasers in Gastroenterology</td>
<td>R Leicester (London, United Kingdom)</td>
<td>13th August 1997</td>
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<tr>
<td>GI Endoscopy Nurses Workshop - &quot;Setting the Standards for Practice&quot;</td>
<td>Staff Members - Endoscopy Unit, University Hospital, Kuala Lumpur, Malaysia</td>
<td>30th April - 2nd May 1999</td>
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<td>Endoscopy 2000</td>
<td>Sydney C S Chung (Hong Kong, China)</td>
<td>13th - 15th April 2000</td>
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<tr>
<td>Endoscopy 2001 - &quot;A Master Class in Therapeutic Endoscopy&quot;</td>
<td>Nib Soehendra (Hamburg, Germany)</td>
<td>14th - 15th April 2001</td>
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<td>Endoscopy 2002</td>
<td>Christopher Williams (London, United Kingdom)</td>
<td>5th - 7th April 2002</td>
</tr>
<tr>
<td>Endoscopy 2003</td>
<td>Douglas Howell (Portland, USA)</td>
<td>28th February - 2nd March 2003</td>
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<tr>
<td>Endoscopy 2004: &quot;Appreciating the Art of GI Endoscopy&quot;</td>
<td>Firas Al Kawas (Washington, USA)</td>
<td>5th - 7th March 2005</td>
</tr>
<tr>
<td>Endoscopy 2005- &quot;Defining the Scope of Excellence&quot;</td>
<td>Guido Costamagna (Rome, Italy)</td>
<td>1st - 3rd April 2005</td>
</tr>
<tr>
<td>Endoscopy 2006- &quot;Frontiers of Therapeutic Endoscopy&quot;</td>
<td>A T R Axon (Leeds, United Kingdom), James Lau (Hong Kong, China), Seo Dong-Wan (Seoul, Korea), Irving Waxman (Chicago, USA), Naohiso Yahagi (Tokyo, Japan)</td>
<td>14th - 16th April 2006</td>
</tr>
</tbody>
</table>
## Event Faculty Date

**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)
**Date:** 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)
**Date:** 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 (Kyoto, Japan)
**Date:** 20th - 22nd March 2009

**Endoscopy 2010 (organised with the APDW 2010) (In conjunction with Selangor 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)
**Date:** 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)
- Moon Jong-Ho (Seoul, Korea)
**Date:** 14th - 17th April 2011

**Endoscopy 2012 “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)
- Rajivinder Singh (Adelaide, Australia)
- Wang Hsiu-Po (Taipei, Taiwan)
- Kenshi Yao (Fukuoka, Japan)
**Date:** 30th - 31st March, 1st April 2012

### Distinguished Endoscopy Lecturers

<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>Orator</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1st</td>
<td>1999</td>
<td>Kees Huibregtse</td>
<td>The Development and Use of Biliary Endoprosthesis in ERCPs</td>
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<tr>
<td>2nd</td>
<td>2001</td>
<td>Nib Soehendra</td>
<td>A Master’s Approach to Therapeutic Endoscopy</td>
</tr>
<tr>
<td>3rd</td>
<td>2002</td>
<td>Christopher Williams</td>
<td>Practical Tips and Pitfalls in Colonoscopy</td>
</tr>
<tr>
<td>4th</td>
<td>2003</td>
<td>Guido N J Tytgat</td>
<td>The Unlimited Horizons of Therapeutic Endoscopy</td>
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<tr>
<td>5th</td>
<td>2004</td>
<td>Yoshio Sakai</td>
<td>Development and Application of Colonoscopy</td>
</tr>
<tr>
<td>7th</td>
<td>2006</td>
<td>Anthony T R Axon</td>
<td>The Impact of New Technology in GI Endoscopy</td>
</tr>
<tr>
<td>8th</td>
<td>2007</td>
<td>D Nageshwar Reddy</td>
<td>Chronic Pancreatitis – Genes to Bedside</td>
</tr>
<tr>
<td>9th</td>
<td>2008</td>
<td>Peter Cotton</td>
<td>Therapeutic Endoscopy – Then, Now and Maybe</td>
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<tr>
<td>10th</td>
<td>2009</td>
<td>Jerome Waye</td>
<td>Exploring the Limits of Endoscopy</td>
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<tr>
<td>11th</td>
<td>2010</td>
<td>David L Carr-Locke</td>
<td>Enhancing the Eye – The Future of Endoscopy</td>
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<tr>
<td>12th</td>
<td>2011</td>
<td>Hisao Tajiri</td>
<td>Enhanced Imaging of the Gastrointestinal Tract</td>
</tr>
<tr>
<td>13th</td>
<td>2012</td>
<td>Robert Hawes</td>
<td>The Current and Future Role of Endoscopic Ultrasonography in GI Practice</td>
</tr>
</tbody>
</table>
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  Adrian Lee   AUSTRALIA
Sydney C S Chung  HONG KONG  Roy E Pounder  UNITED KINGDOM
Teruyuki Hirota   JAPAN  Robert H Riddell  CANADA
Richard H Hunt    CANADA  Henry M Sue-Ling  UNITED KINGDOM
David Johnston    UNITED KINGDOM  Nicholas J Talley  AUSTRALIA
Kang Jin-Yong     UNITED KINGDOM  Guido N J Tytgat  NETHERLANDS
Lam Shiu-Kum      HONG KONG  Cornelis J H Van De Velde  NETHERLANDS

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  Michael Larvin  UNITED KINGDOM
John Dent         AUSTRALIA  Christopher Liddle  AUSTRALIA
R Hermon Dowling  UNITED KINGDOM  Lim Seng-Gee  SINGAPORE
Greg Holdstock    UNITED KINGDOM  J J Misiewicz  UNITED KINGDOM
Kees Huibregts     NETHERLANDS  James Neuberger  UNITED KINGDOM
P W N Keeling     IRELAND  Thierry Poynard  FRANCE
Dermot Kelleher    IRELAND  Jonathan Rhodes  UNITED KINGDOM
Fumio Konishi     JAPAN  Nib Soehendra  GERMANY
John Lambert      AUSTRALIA

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

Masahiro Asaka    JAPAN  Peter Malfertheiner  GERMANY
Douglas E Berg    USA  Kenneth E L McColl  SCOTLAND
Fock Kwong-Ming   SINGAPORE  Hazel M Mitchell  AUSTRALIA
David Forman      UNITED KINGDOM  Pentti Sipponen  FINLAND
David Y Graham    USA  Joseph J Y Sung  HONG KONG, CHINA
Stuart L Hazell   AUSTRALIA  Rakesh Tandon  INDIA
Richard Hunt      CANADA  Guido N J Tytgat  NETHERLANDS
Lam Shiu-Kum      HONG KONG, CHINA  Xiao Shu-Dong  CHINA
Adrian Lee        AUSTRALIA

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

Francis K L Chan  HONG KONG, CHINA  Peter Malfertheiner  GERMANY
Sydney S C Chung  HONG KONG, CHINA  Colm O’Morain  IRELAND
John Dent        AUSTRALIA  Quak Seng-Hock  SINGAPORE
Rikiya Fujita     JAPAN  Nicholas J Talley  AUSTRALIA
Mohammed Al Karawi SAUDI ARABIA  Neville D Yeomans  AUSTRALIA
Mohammad Sultan Khuroo SAUDI ARABIA
### GUT 2000

**24th – 26th August 2000, Melaka**

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Anthony Axon</td>
<td>UNITED KINGDOM</td>
<td>David Mutimer</td>
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<tr>
<td>Geoffrey C Farrell</td>
<td>AUSTRALIA</td>
<td>Ng Han-Seong</td>
<td>SINGAPORE</td>
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<td>Vay Liang W Go</td>
<td>USA</td>
<td>Thierry Poynard</td>
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<td>Humphrey J F Hodgson</td>
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<td>Francis Seow-Cheon</td>
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<td>Peter Katelaris</td>
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<td>Jose D Sollano</td>
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<td>Lim Seng-Gee</td>
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<td>Guido N J Tytgat</td>
<td>NETHERLANDS</td>
</tr>
<tr>
<td>Anthony I Morris</td>
<td>UNITED KINGDOM</td>
<td>Michael Wolfe</td>
<td>USA</td>
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</table>

### Gastro 2001

(With the participation of the American Gastroenterological Association)

**5th – 8th April 2001, Kota Kinabalu, Sabah**

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Aziz Rani</td>
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<td>Mahesh P Sharma</td>
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<td>Fock Kwong-Ming</td>
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<td>Gurkirpal Singh</td>
<td>USA</td>
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<td>Robert N Gibson</td>
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<td>PHILIPPINES</td>
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<td>Richard Hunt</td>
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<td>Koo Wen-Hsin</td>
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<tr>
<td>Edward Krawitt</td>
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### GUT 2002

**27th – 30th June 2002, Penang**

<table>
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### GUT 2003

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

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### GUT 2004

**24th – 27th June 2004, Penang**

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

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

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

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

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### GUT 2009
**14th to 16th August 2009, Pulau Langkawi, Kedah**

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# APDW 2010 (incorporating GUT 2010 & Endoscopy 2010)

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

- Subrat Kumar Acharya, **INDIA**
- Deepak Amarapurkar, **INDIA**
- Ang Tiing-Leong, **SINGAPORE**
- John Atherton, **UNITED KINGDOM**
- Anthony Axon, **UNITED KINGDOM**
- Deepak Bhasin, **INDIA**
- Henry J Binder, **USA**
- Mary Yong, **AUSTRALIA**
- Michael Bourke, **AUSTRALIA**
- Marco Bruno, **THE NETHERLANDS**
- David Carr- Locke, **USA**
- Ashok Chacko, **INDIA**
- Francis Chan Ka-Leung, **HONG KONG, CHINA**
- Adarsh Chaudhary, **INDIA**
- Yogesh Chawla, **INDIA**
- Yang Chen, **USA**
- J Enrique Dominguez-Muñoz, **SPAIN**
- Christoph DuPont, **FRANCE**
- Anders Ekbom, **SWEDEN**
- Geoffrey Charles Farrell, **AUSTRALIA**
- Ronnie Fass, **USA**
- Philip Chu, **HONG KONG, CHINA**
- Pierce Chow, **SINGAPORE**
- Chow Wan-Cheng, **SINGAPORE**
- Sylvia Crutchet, **CHILE**
- Greg Dore, **AUSTRALIA**
- Charles Doon, **FRANCE**
- Anders Ekbo, **SWEDEN**
- Geoffrey Charles Farrell, **AUSTRALIA**
- Ronnie Fass, **USA**
- Fock Kwong-Ming, **SINGAPORE**
- Ruggiero Francavilla, **ITALY**
- Mitsuhiro Fujishiro, **JAPAN**
- Peter Galle, **GERMANY**
- Edward Gane, **NEW ZEALAND**
- Uday Ghoshal, **INDIA**
- Peter Gibson, **AUSTRALIA**
- Marc Giovannini, **FRANCE**
- Takoji Gotoda, **JAPAN**
- Gwee Kok-Ann, **SINGAPORE**
- Robert Heading, **UNITED KINGDOM**
- Marc Giovannini, **FRANCE**
- Peter Galle, **GERMANY**
- Ghee Kok-Ann, **SINGAPORE**
- Robert Head, **UNITED KINGDOM**
- Janaki Hewaviththi, **SRI LANKA**
- Lawrence Ho Khek-Yu, **SINGAPORE**
- Bing Hu, **CHINA**
- Pali Hungin, **UNITED KINGDOM**
- Richard Hunt, **CANADA**

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**GUT 2011**

**27th to 29th May 2011, Kuala Lumpur**

- Akhtar Qureshi, **IRELAND**
- Luigi Bolondi, **ITALY**
- Hiroto Miwa, **JAPAN**
- Chan See-Ching, **HONG KONG, CHINA**
- Philip Chiu Wai-Yan, **HONG KONG, CHINA**
- Kang Jin-Yong, **UNITED KINGDOM**
- Kao Jia-Hong, **TAIWAN**
- George K K Lau, **HONG KONG, CHINA**

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**APDW 2010**

**25th to 28th September 2010, Kuala Lumpur Convention Centre, Kuala Lumpur**

- Subrat Kumar Acharya, **INDIA**
- Deepak Amarapurkar, **INDIA**
- Ang Tiing-Leong, **SINGAPORE**
- John Atherton, **UNITED KINGDOM**
- Anthony Axon, **UNITED KINGDOM**
- Deepak Bhasin, **INDIA**
- Henry J Binder, **USA**
- Mary Yong, **AUSTRALIA**
- Michael Bourke, **AUSTRALIA**
- Marco Bruno, **THE NETHERLANDS**
- David Carr- Locke, **USA**
- Ashok Chacko, **INDIA**
- Francis Chan Ka-Leung, **HONG KONG, CHINA**
- Adarsh Chaudhary, **INDIA**
- Yogesh Chawla, **INDIA**
- Yang Chen, **USA**
- J Enrique Dominguez-Muñoz, **SPAIN**
- Christoph DuPont, **FRANCE**
- Anders Ekbom, **SWEDEN**
- Geoffrey Charles Farrell, **AUSTRALIA**
- Ronnie Fass, **USA**
- Philip Chu, **HONG KONG, CHINA**
- Pierce Chow, **SINGAPORE**
- Chow Wan-Cheng, **SINGAPORE**
- Sylvia Crutchet, **CHILE**
- Greg Dore, **AUSTRALIA**
- Charles Doon, **FRANCE**
- Anders Ekbo, **SWEDEN**
- Geoffrey Charles Farrell, **AUSTRALIA**
- Ronnie Fass, **USA**
- Fock Kwong-Ming, **SINGAPORE**
- Ruggiero Francavilla, **ITALY**
- Mitsuhiro Fujishiro, **JAPAN**
- Peter Galle, **GERMANY**
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- Uday Ghoshal, **INDIA**
- Peter Gibson, **AUSTRALIA**
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- Takoji Gotoda, **JAPAN**
- Gwee Kok-Ann, **SINGAPORE**
- Robert Heading, **UNITED KINGDOM**
- Janaki Hewaviththi, **SRI LANKA**
- Lawrence Ho Khek-Yu, **SINGAPORE**
- Bing Hu, **CHINA**
- Pali Hungin, **UNITED KINGDOM**
- Richard Hunt, **CANADA**

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**GUT 2011**

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- Chan See-Ching, **HONG KONG, CHINA**
- Philip Chiu Wai-Yan, **HONG KONG, CHINA**
- Kang Jin-Yong, **UNITED KINGDOM**
- Kao Jia-Hong, **TAIWAN**
- George K K Lau, **HONG KONG, CHINA**
### MSGH Oration Lecturers

<table>
<thead>
<tr>
<th>No</th>
<th>Year</th>
<th>Orator</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1st</td>
<td>2001</td>
<td>P Kandasami Kuala Lumpur, Malaysia</td>
<td>Gastroenterology in Malaysia</td>
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<tr>
<td>2nd</td>
<td>2002</td>
<td>Barry J Marshall Perth, Australia</td>
<td><em>Helicobacter pylori</em>: How it all came about and where do we go from here?</td>
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<tr>
<td>3rd</td>
<td>2003</td>
<td>Guido J Tytgat Amsterdam, The Netherlands</td>
<td>Future Developments in Gastroenterology</td>
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<tr>
<td>4th</td>
<td>2004</td>
<td>Lam Shiu-Kum Hong Kong, China</td>
<td>Pathogenesis of Gastric Cancer – A Unifying Concept</td>
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<tr>
<td>5th</td>
<td>2005</td>
<td>Meinhard Classen Munich, Germany</td>
<td>GI Cancer – The Global Burden in the New Millennium</td>
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<tr>
<td>6th</td>
<td>2006</td>
<td>John Wong Hong Kong, China</td>
<td>Multi-Disciplinary Treatment in Esophageal Cancer: The Price of Failure</td>
</tr>
<tr>
<td>7th</td>
<td>2007</td>
<td>Norman Marcon Toronto, Canada</td>
<td>New Optical Technologies for Early Detection of Dysplasia</td>
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<tr>
<td>8th</td>
<td>2008</td>
<td>Sydney Chung Hong Kong, China</td>
<td>Ulcer Bleeding: What you really want to know</td>
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<td>9th</td>
<td>2009</td>
<td>Geoffrey Farrell Canberra, Australia</td>
<td>Battling the Bulge in Asia – Implications for Gastroenterologists</td>
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<tr>
<td>10th</td>
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<td>Nicholas Joseph Talley Newcastle, Australia</td>
<td>New Insights into the Aetiopathogenesis of Functional Dyspepsia</td>
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<td>11th</td>
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<td>Colm O’Morain London, United Kingdom</td>
<td>CRC – The Emerging Cancer in the 21st Century</td>
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### Panir Chelvam Memorial Lecturers

<table>
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<tr>
<td>1st</td>
<td>2004</td>
<td>Mohd Ismail Merican Kuala Lumpur, Malaysia</td>
<td>Treatment of Chronic Viral Hepatitis in the Asia-Pacific Region: Realities and Practical Solutions</td>
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<tr>
<td>2nd</td>
<td>2005</td>
<td>Peter Malfertheiner Magdeburg, Germany</td>
<td>Diagnosis and Management of Pancreatic Cancer</td>
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<tr>
<td>3rd</td>
<td>2006</td>
<td>Nageshwar Reddy Hyderabad, India</td>
<td>GI Endoscopy in India – Development and Lessons for the Future</td>
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<tr>
<td>4th</td>
<td>2007</td>
<td>Richard Hunt Hamilton, Canada</td>
<td>Evidence-based Medicine in the Real World</td>
</tr>
<tr>
<td>5th</td>
<td>2008</td>
<td>Pali Hungin Durham, United Kingdom</td>
<td>Plausible Solutions for Impossible Problems</td>
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<tr>
<td>6th</td>
<td>2009</td>
<td>Fock Kwong-Ming Singapore</td>
<td>Lower GI Bleeding – Epidemiology and Management</td>
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<td>2010</td>
<td>Joseph Sung Hong Kong, China</td>
<td>The Future Role of the Gastroenterologist in Digestive Oncology</td>
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<td>8th</td>
<td>2011</td>
<td>Kang Jin-Yong London, United Kingdom</td>
<td>East-West Differences in Gastrointestinal Diseases</td>
</tr>
</tbody>
</table>
Conference Information

SECRETARIAT
GUT 2012
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

CONGRESS VENUE
Holiday Inn Melaka
Jalan Syed Abdul Aziz, 75000 Melaka, Malaysia
Main Line (+606) 285 9000
Direct Line (+606) 285 9180
Fax no (+606) 285 9110
Website www.melaka.holidayinn.com

IDENTITY BADGES
Delegates are kindly requested to wear identity badges during all sessions and functions.

ENTITLEMENTS
Full registrants will be entitled to:
- Malaysia Night
- All Scientific Sessions
- All Satellite Symposia
- Conference bag and materials
- Coffee / Tea
- Lunches
- Admission to the Trade Exhibition area

MEET-THE-EXPERT BREAKFAST SESSIONS
Please obtain the voucher to attend these sessions from the Congress Secretariat. The charge is RM 30 per person per session.

MALAYSIA NIGHT @ 30TH JUNE 2012, SATURDAY
The Malaysia Night will be held at The Straits Ballroom East, Holiday Inn, Melaka, Malaysia.
Delegates can bring their families and guests at RM100 per person. Trade personnel are welcomed to join the function at RM100 per person.
Dress: Smart Casual
Entrance strictly by invitation card only.
Conference Information (cont’d)

SPEAKERS AND PRESENTERS
All speakers and presenters are requested to check into the Speaker Ready Room at least two hours prior to their presentation. There will be helpers on duty to assist with your requirements regarding your presentation.

The Speaker Ready Room is located in the Boardroom and the operating times are:

- 29th June 2012 (Friday)  0730 to 1700 hrs
- 30th June 2012 (Saturday) 0730 to 1700 hrs
- 1st July 2012 (Sunday)  0730 to 1200 hrs

All presentations will be deleted from the conference computers after the presentations are over.

POSTER
Posters will be displayed at the The Straits Ballroom West, Holiday Inn from 0700 hrs on 29th June 2012 till 1200 hrs on 1st July 2012.

PHOTOGRAPHY & VIDEOTAPING POLICIES
No photography or videotaping of the presentations is permitted during the scientific sessions.

MOBILE PHONES
For the convenience of all delegates, please ensure that your mobile phone is put on “Silence” mode during the conference sessions.

LIABILITY
The Organising Committee will not be liable for personal accidents, loss or damage to private properties of participants during the conference. Participants should make own arrangements with respect to personal insurance.

Disclaimer
Whilst every attempt would be made to ensure that all aspects of the Conference as mentioned in this publication will take place as scheduled, the Organising Committee reserves the right to make last minute changes should the need arise.
Function Rooms & Trade Exhibition

HOLIDAY INN MELAKA (LEVEL 1)

<table>
<thead>
<tr>
<th>BOOTH STAND</th>
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<tr>
<td>A2</td>
<td>United Italian Trading (M) Sdn Bhd</td>
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<tr>
<td>A3</td>
<td>Takeda</td>
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UpToDate-Wolters Kluwer Health

Vitramed Pty Ltd

Infors
Is functional dyspepsia a psychosomatic disorder?

Jan Tack
Translational Research Center for Gastrointestinal Disorders (TARGID), University of Leuven, Leuven, Belgium

Functional gastrointestinal disorders (FGID) are characterized by chronic or recurrent abdominal pain or discomfort in the absence of an underlying structural or biochemical abnormality that explains the symptoms. The pathophysiology underlying FGID is another area of long-standing controversy, with some authors focusing on “peripheral” mechanisms, i.e., underlying abnormalities in the gastrointestinal tract, and other focusing on “central” mechanisms, viewing FGIDs mainly as “psychosomatic” disorders. The latter is supported by observations that FGID are characterized by an increased prevalence of maladaptive personality traits (neuroticism), a sexual or physical abuse history, and psychiatric co-morbidity (mood & anxiety disorders). Visceral hypersensitivity is a concept that may unify both schools of thought, as increased sensitivity to gastrointestinal (GI) distension has been demonstrated in several FGID, and this seems to be strongly influenced by psychological processes, particularly anxiety.

It has been hypothesized that dysfunction of pain processing and modulatory systems in the brain, which may be heavily influenced by cognitive-affective processes, underlies visceral hypersensitivity, and could be a common mechanism in FGID. Abnormalities in autonomic nervous system (ANS) function which have also been demonstrated in FGID, could be another manifestation of altered brain responses. However, the exact nature of the complex interaction between these psychological processes and neurophysiological alterations in FGID remain only partially understood.

Current research is characterized by the problematic assumption of homogeneity within single FGIDs, as reflected by the common practice of comparing patient groups as a whole with healthy controls, not taking into account psychological and neurophysiological variability within the patient group. This renders the identification of potential mechanisms that are relevant for subgroups of patients, both within one and across all FGID, impossible.

We conducted systematic studies on gastric sensorimotor function and psychobiological mechanisms in Functional Dyspepsia (FD), one of the most frequent FGID. We demonstrated that cognitive-affective processes including anticipation of pain and its associated anxiety interfere with pain modulatory mechanisms in the brain in FD, leading to increased pain sensitivity and symptom levels. While these findings indicate a central mechanism for symptom generation in FD, we found equally compelling evidence for a contribution of peripheral mechanisms, including altered motility, changes in mucosal integrity and changes in acid clearance.

A comprehensive complex model that integrates many of these findings, explaining symptom pattern and illness behavior in FD will be presented.
HCC is a silent disease that only calls attention to itself when the disease is advanced and symptoms occur. At that stage curative treatment is seldom possible. Thus, in parts of the world where screening is not performed the incidence and mortality are virtually the same. However, when HCC is discovered early cure is frequently possible, particularly with resection, local ablation or liver transplantation. Therefore, in the absence of effective systemic therapy the only way to reduce HCC mortality is to find and treat early stage lesions.

Screening is a process that consists of identifying individuals at risk for HCC, determining the bet screening method and the screening interval, and developing algorithms to deal with abnormal screening test results so that investigations of false-positives is minimized. Studies in HCC have investigated all these aspects. Ultrasound has been demonstrated to be the best HCC screening test. Use of alpha fetoprotein testing adds very little to detection rates or to cure rates. The optimal screening interval is about 6 months. Shorter intervals are associated with a higher false-positive rate and no improvement in survival. Longer intervals are associated with worse survival.

Ideally investigation of abnormal screening test results should detect lesions in the range of 2.0-2.5 cm in diameter. These have the highest likelihood of cure. An algorithm has been developed and validated that allows for accuracy in HCC diagnosis and minimizes the need for biopsy or for excessive radiology. Lesions smaller than 1 cm are usually cirrhotic nodules, and require only repeat ultrasound at shorter, e.g., 3 month, intervals. Lesions larger than 1 cm should be investigated by a 4-phase CT scan or dynamic contrast enhanced MRI. If the appearances are typical of HCC the diagnosis is confirmed. If not, an alternate imaging procedure (CT or MR.) should be done. If the appearances are typical the diagnosis is made. If not, a biopsy is required.
MINIMALLY INVASIVE/INTERVENTIONAL GASTROENTEROLOGY: WHERE HAVE WE BEEN? WHERE ARE WE GOING?
Richard Kozarek
Digestive Disease Institute, Virginia Mason Medical Center, Seattle, Washington, USA

Objective(s)
To define the evolution of interventional gastroenterology from a surgically dominated perspective to the evolution of interdisciplinary care.

Methodology
Historical perspective, current Best Practice predictions regarding possible future scenarios.

Results
Historically, most interventional gastroenterology was performed surgically through open incisions. Improvements in diagnostic imaging, the development of flexible endoscopes and accessories, and refinements in percutaneous procedures have resulted in a seismic shift, as has the introduction of laparoscopic procedures.

Current barriers to integrating GI interventionalists (surgeons, therapeutic endoscopists, interventional radiologists) include: training, space (IR vs OR vs endoscopic suites) and a variable emphasis on GI disorders. Nevertheless, there is a common currency in treating GI bleeding, luminal obstruction or leak, and neoplasia and a strong potential for cross-fertilization of techniques and technology.

Procedures can be labeled as “owned” by a discipline (e.g., resection of an invasive malignancy), competitive (Rx malignant obstructive jaundice), or cooperative (e.g., PTBD-ERCP rendezvous).

Likely future scenarios will include per os Rx obesity, transluminal resection of neoplasms, endoscopic anastomoses, percutaneous ablation of non-liver neoplasms, and a variety of innovative laparoscopic or hybrid (NOTES) respective or palliative techniques.

Discussion and Conclusion
Interventional gastroenterology has schism into different disciplines. Optimization of patient care requires reintegration of those disciplines into common space, administrative structure, and/or philosophy.
There are a number of unsolved issues in the treatment of hepatitis C. Moreover, for those many patients with advanced disease who are not eligible for treatment, the current therapy still remains only a better follow up and complication management. The above issues together with the uncontrolled growth of self-medication makes integrative medicine in chronic liver disease worth great scientific consideration and caution too. Both glycyrrhizin and glycyrrhetinic acid have been found to possess indirect antiviral activity but the poor oral availability has restricted its effective use to cumbersome intravenous administrations, totally unfeasible for “maintenance” treatment. There is growing evidence suggesting the role of free radical injury in the pathogenesis of liver fibrosis, NASH, NAFLD and HCV-related liver disease. Indeed, studies using antioxidants in hepatitis C have focused on the effect of a variety of antioxidants, both nutrients and botanicals. In some cases worthwhile experimental studies, like with sylimarin, catechins or others have then substantially failed when applied in clinical practice. On the other hand, several synthetic antioxidants may raise concerns over their toxicity. Some studies have also shown that high-dosage of (synthetic) d-alpha tocopherol was found to stop the fibrogenesis initiated by stellate cell activation but unafflicting ALT levels, viral titers, or the degree of inflammation. Recent work also demonstrates that the antioxidant resveratrol enhances the hepatitis C virus replication and this is a serious concern for a simplicistic use of antioxidants. This prompts the need to investigate on the effects of different antioxidants on HCV replication before its use. On the other hand preliminary work integrating the nutritional plan in such patients with red palm oil, highly endowed with tocopherols and tocotrienols, seems to counterbalance immune-oxidative derangements in these subjects. Finally, recent experimental and clinical work suggest that the formulation YHK causes the most reliable and dramatic drop of ALT while also stabilizing/improving histology without any known side-effect in medium-term use.
Scientific journals are custodians of scientific endeavour and advancement. They aim to publish novel and sound research that will stand careful scrutiny and independent replication by others. Published work should stimulate further discussion and research. Prospective young authors who aspire to publish a high impact paper must follow the basic principles of scientific endeavour. The work should focus on an important research question and must employ a sound study design with adequate power and utilisation of statistical expertise from the outset. Great care must be taken to include the right controls. When drafting the manuscript, one must present the story in the clearest and most convincing manner. Essential questions include: does the story make sense? Does the introduction make the research seem relevant and important? Is there a clear message? Does the discussion answer the “So what” question? It is often helpful to ask a non-specialist to assess the manuscript for readability prior to submission. The language and grammar have to be presented to the highest standards as this denotes diligence and enhances the chances of success. When considering submission of the manuscript, it is essential to be cognisant of the journal’s remit and guidelines. This will prevent wasted effort and time. The abstract must be written in an impeccable manner as it is often the key to getting the manuscript sent for review. The covering letter is also important and must highlight the novelty and impact of the work and why the specific journal was chosen. Most manuscripts are rejected due to flaws in design or methodology, lack of novelty, lack of clear message, and reporting of small incremental effects. Naturally, addressing these weaknesses from the outset will ensure a much higher rate of success.
Upper gastrointestinal bleeding (UGIB), especially peptic ulcer bleeding, remains one of the most important causes of hospitalization and mortality worldwide. In 2010, a panel of experts from 12 Asia Pacific countries reviewed literature and international guidelines and arrived at recommendations for the Asia Pacific region on the management of nonvariceal upper GIB. The Consensus group recommends risk assessment using a prognostic score system before endoscopy. The use of pre-endoscopy proton pump inhibitor is recommended in those awaiting endoscopy. An adherent clot on a peptic ulcer should be treated with endoscopy combined with a PPI especially if the clot cannot be removed. Patients with low-risk endoscopic stigmata can be discharged early. Considerations should be given to their co-morbid factors. Endoscopic intervention within 24 hours is considered to improve outcomes of patients at high risk. Routine second look endoscopy is not recommended but selected patients at high risk of recurrent bleeding or suspected of having a rebleed can be considered for second look endoscopy. Both high-dose intravenous and oral PPIs can be recommended after endoscopic hemostasis. The optimal dose remains controversial. Angiographic embolization should be considered as an alternative to surgery in patients for whom endoscopic hemostatic treatment has failed. Among patients who continue to require NSAIDs, both non-selective NSAID plus a PPI and a COX-2 selective NSAID reduce rebleeding but substantial risk remains. COX-2 selective non-steroidal anti-inflammatory drugs combined with a PPI are recommended for patients with very high risk of UGIB. Aspirin should be resumed soon after endoscopic treatment among aspirin users with high cardiothrombotic risks. As a maintenance treatment, clopidogrel alone is no safer than aspirin plus a PPI. When dual antiplatelet agents are used, prophylactic use of a PPI reduces the risk of adverse gastrointestinal events. Future challenges in management of patients with acute nonvariceal upper GIB will include an increasingly aging population with significant cardiovascular co-morbidities and wider use of antiplatelet agents and the use of new drugs in anticoagulation.

**S2**

**RADIOLOGICAL TREATMENT IN DIFFICULT CASES**

Wong Ka-Tak

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The Chinese University of Hong Kong, Hong Kong SAR, China

Over the past two decades, transcatheter arterial embolization (TAE) has become increasingly used for the management of upper gastrointestinal bleeding refractory to endoscopic haemostasis. With the effort of experienced and dedicated interventional radiologists, TAE is a safe and effective method in difficult cases of endoscopic treatment. The role of TAE has expanded significantly, which is related to advances in catheter-based techniques, development of better embolization material and increasing recognition of this minimally invasive treatment by gastroenterologists.

The lecture aims to provide an overview on the principle and use of TAE in management of various causes of upper gastrointestinal bleeding.
ROLE OF CHRONIC INFLAMMATION IN GI CANCER
Emad El-Omar
Chair of Gastroenterology, Aberdeen, United Kingdom

Chronic inflammation has long been known to increase the risk of cancer in the affected tissues. This complication is particularly notable in the gastrointestinal tract. Helicobacter pylori (H. pylori) -associated gastric cancer represents a classic example of this paradigm, and the unravelling of this model will enhance our understanding of many other cancers of unknown aetiology. Gastric cancer occurs in a milieu characterized by severe inflammation, hypochlorhydria, and atrophy, all of which precede malignant transformation by decades. H. pylori infection is now recognized as the initiating factor for this cascade of pathophysiological abnormalities that culminates in cancer. There is ample epidemiological evidence to support this link but increasingly, the basic molecular pathways of this association are being uncovered. Inflammatory cells produce a wide range of mediators including pro-inflammatory cytokines, chemokines, reactive oxygen species, growth factors and eicosanoids. COX-2 may be a linchpin in orchestrating many of the mutagenic effects of these products and this is supported by the studies showing the chemopreventative benefits of COX inhibitors. Cytokine gene polymorphisms undoubtedly contribute to individual risk of malignancy but their importance lies in their contribution to the understanding of inflammation-mediated carcinogenesis. The fact that chronic inflammation impacts on crucial cellular processes such as proliferation, adhesion, apoptosis, angiogenesis and transformation highlights its pivotal role in the pathogenesis of gastrointestinal malignancy. Recent data have provided a very interesting insight into the role of chronic inflammation in sporadic colorectal cancer. This better understanding of the pathogenesis of chronic inflammation and GI cancer will no doubt translate into preventive and curative strategies in due course.

A MULTIMODAL APPROACH TO THE TREATMENT OF HCC
Han Kwang-Hyub
Yonsei University College of Medicine, Seoul, Korea

Treatment of hepatocellular carcinoma(HCC) has changed greatly within the past decade with remarkable success. However, sorafenib still has several limitations in clinical practice such as tolerability or high cost to maintain therapy in Asia.

Combined modality or multidisciplinary approach for the management of HCC may overcome current barrier and improve therapeutic efficacy leading to improve survival in the near future.
Until recently there was no treatment for advanced hepatocellular carcinoma that had been shown in randomized controlled trials to prolong survival. Therefore there was no treatment that was approved by regulatory agencies. That all changed with studies with sorafenib. Sorafenib is a multi-kinase inhibitor that inhibits several metabolic pathways in tumour cells. It has two main mechanisms of action. It inhibits angiogenesis by inhibiting VEG-F and it also inhibits receptor tyrosine kinase such as ras and raf as well as PDGF-beta.

The survival benefit of sorafenib has been documented in two randomized controlled trials, the SHARP trial and the ASIA-Pacific Trial. Patients entered into these studies had either failed TACE or were BCLC stage C. Both trials showed that sorafenib enhanced survival compared to placebo. These results led to the licensing of sorafenib for the treatment of patients in these categories. All patients in the studies were Child’s A, and the efficacy of sorafenib in Child B cirrhosis is not established. However, it does appear to be safe in these patients.

Analysis of subcategories of patients in the trials showed that sorafenib prolong life in those who had vascular invasion as well as extrahepatic disease as well in those with ECOG performance status 0 or 1-2.

Sorafenib has been studied as an adjuvant to TACE. None of the major studies have shown a survival benefit.
The majority of patients who present with hepatocellular carcinoma (HCC) are already at an advanced stage, in which curative attempts are limited. However, in patients with locally advanced disease, loco-regional approach seems quite effective. In modern radiation therapy (RT) technology, high-dose irradiation can be safely delivered to tumors. A wide spectrum of RT technology, particularly external RT, is currently available.

External RT involves three-dimensional conformal radiotherapy (3D-CRT), intensity-modulated radiotherapy (IMRT), image-guided radiotherapy (IGRT), stereotactic body radiotherapy (SBRT), and particle beam therapy. Although each has its own advantage and disadvantage, National Clinical Practice Guidelines (NCCN) recommends 3D-CRT as a platform technology and SBRT as indicated. IMRT is more advanced technology that can make precision RT possible with improved conformality. IGRT system is necessary to verify precision dose delivery and also a prerequisite in SBRT. Recently proton RT, one of particle beam RT, is being introduced. Unique characteristics of dose peak at depth and low entrance dose seem quite attractive. Several reports from Japan show encouraging outcome. However, such advantage is frequently compromised to encompass large tumor. Poor conformality also remains to be improved as well as neutron contamination and limited accessibility.

With the introduction of more advanced technology, precise delivery of high dose radiation has been possible. In early stage of HCC, RT can play a role as a curative aim in parallel with surgical resection or radiofrequency ablation. SBRT seems most useful in this situation. In more advanced stages however, combination approach is most desirable. In Yonsei Liver Cancer Special Clinic, concurrent chemoradiotherapy (CCRT) protocol has been developed and applied to vessel invasive HCC. This approach can achieve substantial improvement of patients’ survival. Furthermore, tumor downstaging as well as compensating hypertrophy of non-tumor liver following CCRT allow surgical resection and long term survival in selected cases.

This approach needs further modification to improve patients’ outcome. Also, no single sophisticated technology can open the door to disease control. Close collaboration among physicians with various specialties cannot be too important.
The management of HCC has evolved over last few decades, the armamentarium of treatment options has expanded and outcomes have improved from very dismal to good in the long term. Liver transplant (LTx) seems to be the ideal treatment option for HCC because of its unique ability to simultaneously provide the best possible oncological clearance and remove the pre-malignant environment of the dysfunctional cirrhotic liver. Because HCC patients are relatively well preserved and do not have very advanced liver dysfunction, they generally tolerate the operation well. Initial attempts of LTx for HCC were met with very high recurrence rates and limited survival benefit. However, patients with limited HCC had excellent outcomes after LTx as defined by the Milan criteria. LTx has been accepted as a standard of care for treatment of patients with HCC within Milan criteria and also get priority on the waiting list. Since that time, accuracy of imaging techniques has improved results of down-staging techniques and LTx have improved. With these advances, various extensions of the Milan criteria have been described with comparable outcomes. While most criteria are extensions of the size and tumor numbers, parameters such as tumor volume or biological markers have been included in some criteria. Most criteria are consistent in excluding patients with extra-hepatic disease and vascular invasion from transplantation. Another major advance has been the success of living donor LTx which virtually allows an immediate elective LTx which may be planned in concordance with other therapies the patients might be receiving without putting other patients on the waiting list at a disadvantage. Our results of patients undergoing LTx for HCC indicate an acceptable 1 and 3 year survival for patients within and beyond Milan and other extended criteria.
Hepatic Steatosis

Owing to the invasive nature of liver biopsy, a few non-invasive assessment of hepatic steatosis have been evaluated. Ultrasound can only detect hepatic steatosis of >33%. Proton magnetic resonance imaging can detect hepatic steatosis of >5%, but it is limited by high cost and availability. Using the mechanism of ultrasonic attenuation, a Controlled Attenuation Parameter (CAP) has been integrated into the Fibroscan machine for measurement of hepatic steatosis. CAP can detect hepatic steatosis of >10% with approximately 80%-90% accuracy. The clinical significance of detecting hepatic steatosis is on the diagnosis of fatty liver disease. However, the severity of fatty liver disease has little correlation with the amount of hepatic fat. In other words, the clinical use of quantification of hepatic steatosis percentage has yet to be determined.

Hepatic Fibrosis

Assessment of hepatic fibrosis is becoming increasingly important in the management of all chronic liver diseases. The risk of hepatocellular carcinoma and liver-related mortality increased among patients with advanced liver fibrosis in all liver diseases. In chronic hepatitis B, all regional guidelines recommend antiviral therapy among patients with active viremia and advanced liver fibrosis regardless of the ALT levels.

Liver biopsy has long been the gold standard for assessment of liver fibrosis. Recently, Fibroscan has been extensively investigated as a non-invasive measure of liver fibrosis. The diagnostic performance of Fibroscan is generally superior to serum markers. In chronic hepatitis B, elevated ALT level will increase the liver stiffness and should always be taken into consideration on the interpretation of liver stiffness measurements. On the other hand, intrahepatic fat does not seem to affect liver stiffness in fatty liver disease. The availability of non-invasive assessment of liver fibrosis reduces the need of liver biopsy and allows monitoring of fibrosis progression in chronic liver diseases.
Acute pancreatitis (AP) is a potentially life threatening condition. Even though severe AP has traditionally been defined according the Atlanta Criteria of 1993, currently the International Working Group is revising the original Atlanta definitions. Currently, patients who die or have persistent organ failure (>48hrs) are defined as having severe disease. Recently another new category called the moderately severe AP (MSAP) has been described, which is characterized by presence of only local complication like pancreatic necrosis and peripancreatic collections. This group of patients has low mortality but high morbidity.

It is essential to identify the subgroup of patients, who are at risk of developing organ failure or local complications, as early as possible after admission. Several single and multiple parameter predictors have been evaluated over the years to assess for the development of outcomes like necrosis, organ failure and death. A recent multicenter study have shown that BUN of 20mg/dL at admission and any rise in the levels at 24hrs increases the risk of in-hospital mortality by 4.6 (95% CI 2.5-8.3) and 4.3 (95% CI 2.307.9) respectively. Hemoconcentration is a pathophysiological hallmark of AP and is reflected by the hematocrit. Even though the role of hematocrit in predicting adverse outcomes is conflicting across studies, a high hematocrit at admission and a failure to fall in 24-48hrs despite adequate hydration should be viewed with caution, and these patients should be strictly monitored. Serum procalcitonin might have some value in predicting infected pancreatic necrosis and severe disease when used along with other severity assessment parameters. Among the multi-parameter predicting systems, the BISAP system showed strong association with necrosis, organ failure and mortality. However, this could be complicated as a routine bedside tool. Moreover, BUN which is a component of BISAP by itself has good predictive capability. The harmless acute pancreatitis score is another new tool that identifies the patients who would not develop severe disease.

Once the patients develop severe disease, the monitoring and assessment is directed to track the dynamics of the clinical and laboratory parameters; and treatment aimed to ameliorate these.
A MULTI-MODAL APPROACH IN SEVERE PANCREATITIS
Richard Kozarek
Digestive Disease Institute, Virginia Mason Medical Center, Seattle, Washington, USA

Objective(s)

To define a multi-disciplinary treatment for severe acute pancreatitis/pancreatic necrosis.

Methodology

We undertook a retrospective 10-year and prospective 5-year study of patients admitted to our tertiary care, high volume pancreatitis referral center. One thousand seven hundred patients with acute pancreatitis seen over that time period, 135 (9%) with SAP defined as ICU care, MSOF, 10d hospitalization, need for necrosis drainage, or death. Historically, our institution placed multiple large percutaneous drains for infected necrosis (N=46), reserving surgical debridement for failure. Currently, we undertake dual modality drainage (DMD) (N=79) using small percutaneous catheters and endoscopic transgastric stenting.

Results

Since switching to DMD, we have decreased need for F/U CTs and drain studies by half (p = 0.001), cut hospitalization time by 60% (p = 0.001), decreased length of percutaneous drainage by 60% (p = 0.001), and have had no patient go to surgery for unsuccessful drainage or disconnected PD syndrome. There have been 2 deaths in the DMD and 3 in our conventionally treatment group (1.5%/6.5%).

Discussion and Conclusion

A multidisciplinary approach to SAP and walled off pancreatic necrosis has led to improved outcomes at a pancreatitis referral center.
Acute pancreatitis is an evolving disease, with disease spectrum ranging from mild oedematous pancreatitis, to pancreatic necrosis, and to retroperitoneal necrosis of the fatty tissue and peri-pancreatic abscess. Mortality from severe acute pancreatitis follows the two peaks modal – first peak arises at the first week and the late mortality arises at the third/fourth weeks. The early mortality is associated with overwhelming Systemic Inflammatory Response Syndrome (SIRS) with multi-organ failure; the late mortality is attributed to complications of infected necrosis, leading to multi-organ failure. Up to 20% of the acute pancreatitis will eventually develop pancreatic necrosis and retroperitoneal necrosis. Infection of the pancreatic necrosis occurs in 25% in the first week, 44% in the second week, and peaks at 60% at the third week.

Nowadays, surgery is not the first choice of treatment for severe acute pancreatitis. The initial management of severe acute pancreatitis is intensive care (ICU) support; surgical intervention plays no role in the first two weeks because of the high morbidity and mortality associated with resection of highly inflamed pancreas with major blood loss. After two weeks, the pancreatic necrotic tissue can be easily distinguished from the viable pancreas on contrast-enhanced CT (CECT) scans and is relatively easy to debride. Surgical debridement should be postponed as long as possible, and be considered for patients with infected pancreatic necrosis, or >50% non-infected necrosis, who do not response to maximum ICU support after 1 week. For infected, peri-pancreatic fluid collection or pancreatic abscess without pancreatic necrosis (easily distinguished by CECT), percutaneous drainage by interventional radiologist is recommended if clinical signs of sepsis persist.

Recent data from a large, Dutch, multicenter RCT showed that a minimally invasive, step-up approach, as compared with open necrosectomy, reduced the rate of complications or death among patients with necrotizing pancreatitis and infected necrotic tissue. Of the patients assigned to step-up approach, 35% were treated with percutaneous drainage only without the need for minimally invasive necrosectomy.

In summary, fundamental understanding of pathophysiology and natural history of severe acute pancreatitis is crucial to determine timely interventions. A multi-disciplinary approach, which consists of pancreatic surgeon, gastroenterologist, interventional radiologist, and intensivist, is crucial to obtain the optimum outcome.
Nutritional support plays an important role in the management of patients with severe acute pancreatitis. It has been convincingly demonstrated in numerous studies that enteral nutrition is preferable to parenteral nutrition as it leads to significantly better glycemic control and decreases infectious complications and mortality. Indeed, there is accumulating clinical evidence that enteral nutrition can improve survival and reduce the complications accompanying the severe acute pancreatitis.

The explanations are complex and related to the fact that: • enteral nutrition avoids TPN complications; • luminal nutrition maintains intestinal health; • enteral amino acids are more effective in supporting splanchnic protein synthesis; • enteral nutrition may prevent the progression of multiple organ failure. With these apparent benefits, the question has been to determine the most optimal site of tube feeding administration.

Delay in making a decision may have an impact on the clinical outcome as it is now believed that enteral nutrition should commence as soon as possible after hospital admission in order to maximize clinical benefits. A number of RCTs and meta-analysis have demonstrated the equivalence of nasogastric and nasojejunal tube feeding in terms of safety and tolerance in critically ill patients. While this may be true in general, it is recognized that patients with severe acute pancreatitis are particularly prone to gastric ileus because of the inflamed pancreas. A systematic review of the literature demonstrates the safety and tolerance of nasogastric tube feeding in 4 out of 5 patients with predicted severe acute pancreatitis. Meta-analysis also demonstrate that there is no difference between nasogastric and nasojejunal tube feeding with respect to safety and tolerance. There is now convincing evidence that patients with acute pancreatitis have significantly lower rates of pancreatic enzyme secretion into the duodenum as compared to healthy subjects and this may explain the above findings.
Meet-the-Expert Breakfast Session (4)

NEW AGENTS FOR HCV – IS IT READY FOR PRIME TIME?

Henry L Y Chan
Department of Medicine and Therapeutics and Institute of Digestive Disease,
The Chinese University of Hong Kong, Hong Kong SAR, China

The treatment of chronic hepatitis C virus (HCV) infection is revolutionized by the development of direct acting antiviral agents (DAA). Teleprevir and boceprevir, used in combination with peginterferon and ribavirin, can significantly increase the sustained response rate of both treatment naïve and treatment experienced genotype 1 HCV infected patients. Response guided therapy based on the on-treatment HCV RNA levels is recommended for both treatment. In this way, shorter duration of therapy is possible for rapid responders and prompt treatment cessation can be offered to poor responders to reduce the risk of drug resistance.

Approximately 70% of treatment naïve patients respond to the DAA triple therapy. For treatment experienced patients, previous relapsers tend to respond better than partial responders and null responders; and liver cirrhosis will reduce the chance of responding to the DAA triple therapy. One problem of the newer direct antiviral agents is their side effects. Anemia is a common problem with both drugs, but it is associated with improved response to treatment. Teleprevir is also associated with rash problem. As these drugs are inhibitors of CYP3A4, they may have problems of drug-drug interaction.

Interleukin 28B (IL28B) polymorphism is one factor that can predict the response to peginterferon and ribavirin combination therapy. In Asia, majority of the population has favorable IL28B genotype for response. Among approximately 20% Asian patients who have low baseline HCV RNA and can attain RVR with the dual peginterferon and ribavirin combination therapy, 24 week of therapy may be sufficient to achieve sustained viral response. Using the DAA triple therapy, patients with favorable IL28B genotype have approximately 80% chance to shorten the duration of therapy under the response guided therapy regime. It is still debatable whether the newer DAA should be recommended as the first line therapy for all HCV infected patients in Asia.
In addition to palliation with plastic or SEMS, new endoscopic techniques to improve quality of life and survival are evolving. Photodynamic therapy (PDT) is a novel technique for palliation for unresectable cholangiocarcinoma. PDT incorporates the use of a photosensitizing agent, which selectively accumulates in proliferating tissue such as malignant tumours. Photoactivation with a red laser light generates reactive oxygen species leading to selective tumor-cell death. After promising results from preliminary uncontrolled studies with PDT for the treatment of nonresectable cholangiocarcinoma, results of RCT are published. Ortner et al published the first randomized controlled trial that confirmed dramatic increase of median survival time after PDT compared to patients receiving only endoprosthetic therapy. Survival time of PDT patients was 493 days (16.4 months) compared to 98 days (3.3 months) for stenting alone. Treatment with PDT and stenting also led to improvement of cholestasis and quality of life compared with endoscopic stenting alone. Study by Zoeppf et al showed the median survival time after randomization was 7 months for the control group and 21 months for the PDT group (p = 0.0109). Application of RFA within the bile duct induces local coagulative necrosis. In a recent pilot study of 21 patients, Steel et al demonstrated the safety and efficacy of RFA within the bile duct by using a bipolar RFA catheter in patients with malignant obstructive jaundice without any major complication. Endobiliary RFA adds to the endoscopic armamentarium for the treatment of these subjects. However, further randomized controlled trials are needed to establish improved SEMS patency, cost-effectiveness, and survival advantages, if any.
In 2010, the World Health Organization estimated there were a total of 1.93 billion overweight (Caucasians, BMI ≥ 25; Asians, BMI ≥ 23) or obese (Caucasians, BMI ≥ 30; Asians, BMI ≥ 25) adults worldwide, which includes 38% of adults over the age of 15. Although the epidemiology of obesity is known to be genetically predisposed, with metabolic factors playing a key role in the pathogenesis of the disease, the recent rise in prevalence of global obesity appears to be mostly driven by widespread urbanization with a shift to more sedentary lifestyles and increased intake of high-calorie processed foods. At the current rate, it is estimated that some 2.3 billion adults would be overweight by 2015, with some 700 million of them being obese. Unlike decades ago when obesity was primarily associated with affluent western lifestyles, today’s obesity prevails across all socio-economic groups, posing widespread healthcare and economic burdens. Obesity is associated with a host of potential co-morbidities that significantly increase one’s morbidity and mortality. It has been found to reduce life expectancy by about 7 years in 40-year-olds, and overweight/obesity (BMI ≥ 25) ranks 5th in risk for deaths in adults, resulting in about 2.8 million adult deaths per year. Specifically, it has been shown that the likelihood of developing type 2 diabetes, stroke, cardiovascular diseases, osteoarthritis, obstructive sleep apnea, and certain types of cancer increases as BMI rises above the optimal level. An estimated 23% of ischemic heart disease burden and 44% of diabetes burden are attributable to overweight/obesity. Abdominal obesity, in particular, independently increases the risk of developing type 2 diabetes, while visceral obesity is associated with increased insulin resistance. Increasing prevalence of obesity has escalated the incidence of type 2 diabetes, which is particularly evident in Asia, the epicentre of current epidemic diabetes emergence. It is estimated that by 2030, more than 60% of the world’s diabetic population would come from Asia. A recent study revealed that 92.4 million adults in China already suffered from diabetes, and another 148.2 million adults are having impaired glucose tolerance. In India, the number of people with diabetes is believed to have approached 71.3 million in 2010. The world diabetic population is estimated to double by 2025, and reach half a billion by 2030. The healthcare and economic burdens from obesity will certainly be a lot larger than previously estimated, probably beyond what the world is prepared to cope with. While pharmacological agents are available for treatment of obesity, treatment options for the severely obese (BMI ≥ 40) remain limited, with bariatric surgery being the mainstay intervention.
Obesity is a serious, chronic illness affecting all ages, threatening to evolve into a pandemic that can overwhelm health systems around the globe. Bariatric surgery remains the most effective treatment for the management of obesity, as of date. A plethora of endoscopic tools and procedures are under investigation for obesity management, and these may offer new weight loss options to a variety of different patient populations. Several endoscopic tools, utilizing either restrictive or malabsorptive strategy, have demonstrated their safety and efficacy in the management of obesity. Endoluminal interventions offer the potential for an ambulatory weight loss procedure that may be safer, less invasive and more cost-effective compared with current laparoscopic approaches. Several endoscopic tools have also demonstrated effectiveness as revisional tools for reversing weight gain after bariatric surgery. Currently work is on to define a role for NOTES procedures also in the management of obesity. Understanding the relative advantages and shortcomings of the endoscopic tools and procedures currently under investigation will provide the gastroenterologist with valuable insight into the future of endoscopic procedures for weight loss.
Food is central to everyone’s life. In the main, we enjoy food as sustenance, comfort and entertainment! However, for some food takes on a different association. Living with obesity, and regular dieting can spoil a person’s relationship with food. Sometimes the enjoyment of food, followed by the guilt of having eaten can ruin an otherwise happy lifestyle. This can lead to significant distress and medical co-morbidity.

Over the last 40 years, interventional treatments for morbid obesity have evolved into more applicable and acceptable measures. Surgery for weight loss involves one of three mechanisms: reducing appetite, reducing the ability to eat, and reducing food absorption. Most of the common operations will work by one or two of the above mechanisms.

The most popular operation is gastric banding. This involves placing an inflatable plastic ring around the upper stomach to restrict the passage of food. It will slightly reduce appetite, but doesn’t change the absorption of foods – so inappropriate foods with high calories will still be absorbed. Gastric bands work best for those who enjoy big meals, but rarely snack.

Gastric Bypass surgery is thought to be the most complete surgical procedure for weight loss. It involves partitioning a small proximal pouch of stomach for swallowed food to enter. The food is then re-directed into a long intestinal bypass loop. This causes a loss of appetite, restriction of eating, and an altered enteric hormonal response to foods. It suits a wider variety of people, especially those with a sweet tooth or a snacking, irregular meal habit.

As with most functional surgical interventions, lifestyle change and compliance with dietary rules determines long term outcome.

The role of surgical procedures in the management of morbid obesity will be reviewed, with a critical review of long-term results and thoughts for the future.
**BEST PAPER AWARD PRESENTATIONS**

**OP 01**  
A COMPARATIVE STUDY ON HIGH DOSE VERSUS LOW DOSE ORAL ESOMEPRAZOLE IN PREVENTION OF POST-ENDOSCOPIC VARICEAL LIGATION (EVL) ULCER BLEEDING  
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**OP 02**  
APC PROMOTER METHYLATION IN A COHORT OF COLORECTAL CANCER PATIENTS IN MALAYSIA  
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**OP 03**  
FORWARD-VIEWING EUS-GUIDED NOTES INTERVENTIONS: A STUDY ON PERITONEOSCOPIC POTENTIAL  
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**OP 04**  
PREVALENCE OF NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) AMONG PATIENTS IN THE OUTPATIENT DIABETIC CLINIC IN A MALAYSIAN TERTIARY CARE HOSPITAL  
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**OP 05**  
RANDOMIZED CLINICAL TRIAL: EFFECTS OF PROBIOTICS L CASEI SHIROT A ON FUNCTIONAL CONSTIPATION - A DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY  
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A COMPARATIVE STUDY ON HIGH DOSE VERSUS LOW DOSE ORAL ESOMEPRAZOLE IN PREVENTION OF POST-ENDOSCOPIC VARICEAL LIGATION (EVL) ULCER BLEEDING

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Background
Elective endoscopic variceal ligation (EVL) is performed to reduce the risk of oesophageal variceal bleeding. However, EVL is associated with side effects including chest pain, dysphagia, odynophagia as well as post-ligation bleeding due to post-EVL ulcers. Gastric acid reflux worsens these ulcers and delays the healing. Proton pump inhibitors (PPIs) are proven potent pharmacological agents that reduce gastric acid effects.

Objectives
To assess the efficacy of low dose versus high dose esomeprazole in the prevention of post-EVL ulcer bleeding and ulcer healing at 21 days.

Methodology
We performed a single-blinded, randomised controlled trial in a tertiary gastroenterology referral centre in Malaysia. Sixty-four patients were randomised between June 2010 and June 2011. Subjects in the low-dose arm received oral esomeprazole 40 mg once daily while the high-dose arm received 40 mg twice-daily dosing for 21 days post-EVL. All subjects then underwent a repeat endoscopy at 21 days. The primary endpoint was post-EVL ulcer bleeding.

Results
All 64 patients completed the protocol. No subjects in both arms experienced any variceal bleeding during the study. However, the low-dose arm subjects had higher incidence of ulcer at 21 days. In multivariate analysis, older age and alcoholic cirrhosis predict slower post-EVL ulcer healing.

Discussion and Conclusion
Low-dose esomeprazole was equally effective as high-dose in preventing post-EVL ulcer bleeding but with a slower rate of ulcer healing.
OP 02

APC PROMOTER METHYLATION IN A COHORT OF COLORECTAL CANCER PATIENTS IN MALAYSIA

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Objective

Methylation in APC gene that lead to its inactivation is thought to play a major role in colorectal cancer (CRC) carcinogenesis. Studies focusing in CpG island methylations in APC gene promoter have not been successfully in explaining its influence in CRC phenotype. This study aims to investigate the pattern of APC methylation in our local CRC patients.

Methodology

A total of 186 CRC patients were analyzed for the methylation pattern of Promoter 1A region of APC gene in both tumour and adjacent normal tissues using Methylation Specific PCR (MSP) and sequencing analysis.

Results

We found methylation in Promoter 1A region of APC gene in 48.9% (91/186) of tumour samples from CRC patients. From a total of 91 patients with positive methylation, 21 subjects showed heavily methylated pattern at two regions of Promoter 1A. The frequency of methylation was found to be higher in Chinese and Malays compared to Indians, although without statistical significance. The methylation status also didn’t show any significant association with other clinicopathological features.

Conclusions

In summary, the frequency of APC gene methylation was high in our CRC patients and distributed evenly among three main ethnic groups in Malaysia.
OP 03
FORWARD-VIEWING EUS-GUIDED NOTES INTERVENTIONS: A STUDY ON PERITONEOSCOPIC POTENTIAL
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Background
Forward-viewing endoscopic ultrasound (FV-EUS) is an ergonomic and viable endoscopic modality to perform transgastric (TG) peritoneoscopic interventions via natural orifice transluminal endoscopic surgery (NOTES).

Objective
To evaluate the technical feasibility of diagnostic and therapeutic TG peritoneoscopic interventions with a FV-EUS

Design
Prospective endoscopic experimental study in an animal model.

Setting
Tertiary referral center animal laboratory.

Intervention
Combined TG peritoneoscopic interventions and endoscopic ultrasound (EUS) examination of the intra-abdominal organs were performed using a FV-EUS on 10 animal models (1 porcine and 9 canine). The procedures carried out include EUS evaluation and endoscopic biopsy of intraperitoneal organs, EUS-guided fine needle aspiration (EUS-FNA), EUS-guided radiofrequency ablation (EUS-RFA) and argon plasma coagulation for hemostatic control.

Main Outcome Measures
The feasibility of FV-EUS in NOTES peritoneoscopic interventions

Results
In all 10 animals, TG peritoneoscopy followed by endoscopic biopsy for the liver, spleen, abdominal wall and omentum were performed successfully. Argon plasma coagulation was beneficial to control minor bleeding. Visualization of intra-abdominal organs with real-time EUS was accomplished with ease. Intraperitoneal EUS-FNA was successfully performed on the liver, spleen and kidney. Similarly, a successful outcome was achieved with EUS-RFA of the hepatic parenchyma. No adverse events were recorded during the study.

Limitations
Small sample size with short-term observation period.

Conclusion
Peritoneoscopic NOTES interventions using a FV-EUS were feasible in providing EUS evaluation and in performing EUS-FNA, EUS-RFA and endoscopic biopsy of various intra-abdominal organs from the peritoneal cavity. It promises immense potential as a platform for future EUS-based NOTES procedure.

Key Words
Forward-viewing EUS, Peritoneoscopy, Natural orifice transluminal endoscopic surgery
OP 04

PREVALENCE OF NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) AMONG PATIENTS IN THE OUTPATIENT DIABETIC CLINIC IN A MALAYSIAN TERTIARY CARE HOSPITAL

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Objectives

To determine the prevalence of NAFLD among diabetics and to identify associated factors.

Methodology

Consecutive patients seeing two endocrinologists in the Diabetic Clinic in University of Malaya Medical Centre between November 2011 and April 2012 were enrolled. Patients with known chronic liver disease other than fatty liver and patients who did not agree to participate were excluded. Baseline demographic and anthropometric data and relevant clinical and laboratory data were obtained using a standard protocol. The Global Physical Activity Questionnaire (GPAQ) and a food-frequency questionnaire were used to assess physical activity and dietary intake, respectively. Blood tests for viral hepatitis B and C were performed and patients who tested positive were excluded. Diagnosis of NAFLD was ultrasound-based and following exclusion of significant alcohol intake.

Results

Data for 351 patients were available for analysis. Mean age of the study population was 62.8 ± 10.7. Prevalence of NAFLD was 50.4% with no significant difference between gender (51.7% in men vs. 49.5% in women, \( p = 0.689 \)). NAFLD was significantly more common among non-Chinese compared to Chinese (55.7% vs. 43.6%, \( p = 0.02 \)). NAFLD was more prevalent among “younger” patients less than 65 years old. Patients with NAFLD were more obese (overall and centrally), and had higher HbA1c and serum triglyceride levels, and diastolic blood pressure. Serum ALT, AST and GGT levels were significantly higher among NAFLD patients. On multivariate analysis, only age less than 65 years old (\( OR = 1.656, 95\% \text{ CI} = 1.051 – 2.611, p = 0.030 \)), central obesity (\( OR = 1.740, 95\% \text{ CI} = 1.001 – 3.022, p = 0.041 \)) and serum ALT level greater than 30 IU/L for men and 19 IU/L for women (\( OR = 2.208, 95\% \text{ CI} = 1.318 – 3.699, p = 0.003 \)) were associated with NAFLD.

Conclusions

NAFLD is seen in half of a cohort of mainly elderly diabetics and is associated with “younger” age, central obesity and elevated serum ALT level.
OP 05

RANDOMIZED CLINICAL TRIAL: EFFECTS OF PROBIOTICS L. CASEI SHIROTA ON FUNCTIONAL CONSTIPATION – A DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY

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Objective

Although there is evidence to suggest the probiotic strain L. casei Shirota (LcS) improves constipation condition, it has never been tested in otherwise-healthy adults with functional constipation. Our study aimed to evaluate the efficacy of fermented milk with LcS in adults with functional constipation (Rome II criteria).

Methodology

Subjects with functional constipation were randomized to receive fermented milk containing LcS (>3.0 x 10¹⁰ colony forming units) or placebo nutrient drink without LcS once daily for four weeks. Primary outcomes were constipation severity score (utilizing the Chinese Constipation Questionnaire) and frequency of defecation; secondary outcomes were stool consistency and stool quantity estimations.

Results

Ninety subjects (47 in probiotics group and 43 in control group) constituted the intent-to-treat population. Trend of improvement in the severity score was observed with probiotics administration, but did not reach statistical significance with four weeks intervention (P=0.058). Significant improvement was observed in the severity of sensation of incomplete evacuation (P<0.01 at Week 4), one of the six components of the severity score. A non-significant trend of improvement in stool consistency was observed with probiotics administration. However, the magnitude of the probiotics' effect on stool consistency was statistically significant with d=0.19, 95% CI [0.00, 0.35] and d=0.29, 95% CI [0.11, 0.52] at Week 4 and at one week post-intervention, respectively. No particular trends were observed in the changes to frequency of defecation and stool quantity.

Discussion and Conclusion

The findings indicate that LcS may play a role in alleviating severity of constipation and exert a stool softening effect. However, the intervention period may have been insufficient to observe the full effects of the probiotic. A longer intervention period of between 6 to 8 weeks is necessary to obtain conclusive results.
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Noorharisman1, P A Sutton2, N R Kosai1
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ST Kew
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PP 03  A CASE REPORT OF CHRONIC RIGHT ILIAC FOSSA PAIN SECONDARY TO YERSINIA INFECTION
General Surgery Department, Hospital Sultan Abdul Halim, Sungai Petani, Kedah, Malaysia

PP 04  A COMPARISON OF TRANSARTERIAL ANGIOEMBOLIZATION VERSUS SURGERY AFTER FAILED ENDOSCOPIC THERAPY FOR NON VARICEAL UPPER GASTROINTESTINAL BLEEDING
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PP 05  A RARE CAUSE OF A PANCREATIC HEAD MASS
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Jeevinesh Naidu, Shashi Kumar Menon, Mayleen Kok, Kavitha Balachandran
Gastroenterology Unit, Department of Medicine, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia

PP 07  A REVIEW OF THE DIAGNOSTIC YIELD OF COLONOSCOPY FOR LOWER GASTROINTESTINAL BLEED: IS COLONOSCOPY JUSTIFIED FOR ALL LOWER GASTROINTESTINAL BLEED?
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2International Medical University, Malaysia, Seremban, Negeri Sembilan, Malaysia

PP 08  A STUDY INTO THE DEMOGRAPHIC, CLINICAL SYMPTOMS AND ENDOSCOPIC ASSOCIATIONS OF HELICOBACTER PYLORI INFECTION IN PATIENTS ATTENDING SCREENING AT A MALAYSIAN DIAGNOSTIC CENTRE
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A CASE OF CLOSED LOOP SMALL BOWEL OBSTRUCTION WITHIN A STRANGULATED INCISIONAL HERNIA AND AN ASSOCIATED WITH AN ACUTE GASTRIC VOLVULUS

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Small bowel obstruction is a common clinical problem normally presenting with abdominal distention, colicky pain, absolute constipation and bilious vomiting. There are numerous causes but most commonly an incarcerated hernia, adhesions or obstructing mass secondary to malignancy are implicated. We present an unusual cause of small bowel obstruction secondary to an incarcerated incisional hernia which was also associated with an acute organoaxial gastric volvulus.

Key Words

small bowel obstruction, incarcerated incisional hernia, organoaxial gastric volvulus
A CASE OF MELANOSIS COLI DUE TO TRADITIONAL COMPLEMENTARY MEDICINE

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Introduction
Melanosis coli denotes brownish discoloration of the colonic mucosa on endoscopy or histopathologic examination. This condition has no specific symptom of its own. The pigmentation is caused by apoptotic cells which are ingested by macrophages and subsequently transported into the lamina propria, where lysosomes use them to produce lipofuscin pigment, not melanin as the name suggests.

Case report
A 51-year-old woman came to see the author with complaints of intermittent bleeding per rectum of 6 months’ duration. Physical examination found her well except for raised BP of 160/106mmHg. Examination of her abdomen found a midline surgical scar for tubal ligation, and slight tenderness to the left of the umbilicus.

Colonoscopy found severe melanosis coli throughout the entire colon, and a single flat polyp of 2-3 mm in the rectum. She also has internal haemorrhoids. Histopathology confirmed melanosis coli, and adenomatous polyp with mild epithelial dysplasia at the rectum.

She admitted to taking about 20 capsules a day of traditional complementary medicine for various indications. One of them contains Rhubarb and Cascara, along with 7 other herbal ingredients. She takes two of this “K-1 capsule” on a regular basis for at least a year. Indication on the label was “traditionally used to improve digestion, relief stomach discomfort and mild constipation”.

Discussion
Melanosis coli develops in over 70% of persons who use anthraquinone laxatives (e.g. cascara sagrada, aloe, senna, rhubarb, and frangula), often within 4 months of use. Long-term use is generally believed to be necessary to cause melanosis coli. The condition is widely regarded as benign and reversible, and disappearance of the pigment generally occurs within a year of stopping anthraquinone laxatives.

The prolonged consumption of anthraquinone containing traditional complementary medicine was the cause of melanosis coli in this patient. It was the haemorrhoids that caused her intermittent rectal bleeding.
A CASE REPORT OF CHRONIC RIGHT ILIAC FOSSA PAIN SECONDARY TO YERSINIA INFECTION

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Yersinia enterocolitica is a common cause of food-borne gastrointestinal disease in the moderate and subtropical climates of the world. Y. enterocolitica infection may present as enteritis, terminal ileitis, or mesenteric lymphadenitis (pseudoappendicitis) with watery or sometimes bloody diarrhea.

We report a case of a 46 year old smoker presented with unusual presentation with history of chronic right iliac fossa pain with constitutional symptoms for 2 years. CT Abdomen showed thickening of caecal wall which reported as infective in origin. Colonoscopy features appeared malignant looking ulcer, however biopsies taken revealed as chronic infection. We performed a diagnostic laparoscopy and proceeded with laparoscopic limited right hemicolectomy (in view of patient’s symptoms, inconclusive diagnosis and neoplastic appearance during colonoscopy). Histopathology of the specimen reported as chronic infection secondary to Yersinia enterocolitica.
Objective
To compare the outcome of transarterial angioembolization (TAE) and surgery with endoscopically unmanageable non variceal hemorrhage of the upper gastrointestinal tract.

Method
A retrospective review of all the patients treated for non variceal upper gastrointestinal bleeding from January 2006 to January 2012 was done.

Result
A total of twenty one patients underwent surgery and 24 patients underwent TAE. In those underwent TAE, the bleeding vessels were gastroduodenal artery in 14 patients (58.3%), left gastric artery in 1 patient (4.2%), and right hepatic artery in 4 patients (16.7%). Extravasation of contrast was demonstrated in 58.3% of patients. Embolization was attempted in 19 patients. Bleeding recurred in 8 patients (33%) in the TAE group and 6 patients (28.6%) in the surgery group (p = 0.28). There were no statistically significant difference in post procedure complications (81% vs 62.5%, p = 0.17), 30-days mortality (33% vs 29.1%, p = 0.28), units of blood transfused (12.24 vs 8.92, p = 0.177) and mean hospital stay (30.7 vs 22.9 days, p = 0.281) observed in patients underwent surgery as compared to TAE.

Conclusion
TAE is an alternative to surgery in patients whom failed endoscopic intervention for non variceal upper gastrointestinal bleeding with equivalent overall outcome.
Autoimmune pancreatitis (AIP) is an inflammatory disease that can present with pancreatic masses and ductal strictures in which autoimmune mechanisms seem to be involved in the pathogenesis. It is a rare but a benign disease that mimics pancreatic carcinoma both clinically and radiographically. Thus the diagnosis of autoimmune pancreatitis is challenging to make. There is no single test or characteristic feature that physicians can use to identify autoimmune pancreatitis. Typical radiological finding (diffuse enlargement of pancreas), laboratory marker (Ig G), Histological features (Parenchymal and often periductal lymphoplasmacytic infiltration, storiform fibrosis, obliterative phlebitis), extrapancreatic involvement as well as response to steroid are important in making the diagnosis of autoimmune pancreatitis. We report a case of autoimmune pancreatitis which a 58 year-old lady, non-alcoholic and non-smoker, presented with obstructive jaundice and also abdominal pain. Computer Tomography (CT) Scan showed a pancreatic head mass. Suspecting a pancreatic carcinoma, Whipple’s procedure was done in a hospital prior to referral to our clinic. She was referred to our clinic 1 year later due to persistent diarrhoea and abdominal pain. Subsequent histopathological report showed features suggestive of autoimmune pancreatitis. IgG Subclass-4: >152 mg/dl (3.9-86.4). Accurate diagnosis of autoimmune pancreatitis is important to avoid unnecessary pancreatic resection with its associated morbidity and mortality. Additionally the disease is steroid responsive. Even though there should not be a delay in cases of pancreatic carcinoma, the absence of constitutional symptoms with atypical radiological findings should trigger a need for a quick review of the differential diagnosis and further investigations instituted should cast doubt in its diagnosis and steroid instituted before a Whipple’s surgery is done.
A RETROSPECTIVE ANALYSIS OF BARRETT’S OESOPHAGUS IN HOSPITAL KUALA LUMPUR

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Aim
To identify and analyse the number of confirmed cases of Barrett’s Oesophagus in Hospital Kuala Lumpur over a one year period.

Background
Barrett’s Oesophagus is known to be a predictor for the development of oesophageal adenocarcinoma. The risk increases with the degree of dysplasia identified by histopathological examination. We undertook a retrospective descriptive study of patients who underwent upper GI endoscopy (OGD) at Hospital Kuala Lumpur.

Subjects and Methods
We filtered search results from the Malaysian Gastrointestinal Registry (MGIR) based on the patients who had endoscopic evidence of Barrett’s Oesophagus and correlated this with the histopathology reports from oesophageal biopsies obtained at the time of endoscopy.

Results
A total of 7225 patients underwent OGD at our centre from 1st January 2011 to 1st January 2012. 51 patients had endoscopic evidence of Barrett’s oesophagus. Of the 51 patients identified in the MGIR, only 41 had correlating histopathology reports on the IT system.

16/41 (39%) patients had confirmed Barrett’s oesophagus of which 15/16 (93.75%) had no dysplasia and 1/16 (6.25%) had low grade dysplasia.

Amongst the patient’s with Barrett’s, the mean age was 63.5 years old with 68.75% male and 31.25% female.

7/16 (43.75%) patients were of Chinese origin, 5/16 (31.25%) patients were of Indian origin, 4/16 (25%) of Malay origin.

No patients had Barrett’s if segment length on endoscopy was <1cm. The only patient with low grade dysplasia had a segment length of 11cm.

Conclusion
41 patients were diagnosed with Barrett’s Oesophagus in the year 2011 at Hospital Kuala Lumpur. This amounts to 0.5% of the total number of OGD’s performed at our centre in one year. Dysplasia was noted in 1 patient.
PP 07

A REVIEW OF THE DIAGNOSTIC YIELD OF COLONOSCOPY FOR LOWER GASTROINTESTINAL BLEED: IS COLONOSCOPY JUSTIFIED FOR ALL LOWER GASTROINTESTINAL BLEED?

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Background

Acute per rectal bleed is the most common colorectal emergency. Although colonoscopy is warranted for all per rectal bleed, little study has been done to look at the diagnostic yield of colonoscopy for this indication.

Aim

To determine etiology and diagnostic yield of all lower gastrointestinal bleed.

Method

A cross sectional study of all colonoscopy done from year 2006 -2010 was reviewed. Etiology of lower gastrointestinal bleed were then divided into hemorrhoid, polyp/tumor, diverticulosis, colitis, others (only blood seen), ulcer and normal colonoscopy.

Results

Total of 2451 colonoscopies was done as elective or emergency cases from 2006-2010. Mean age of these patients was 57.57. Male to female ratio was 1.31. 25.66% (n=629) were for lower gastrointestinal bleed. 16.22% (n=102) had hemorrhoids with 1.11% <30years (n=7), 28.62% (n=180) had polyp/tumor with 0.95% <30y (n=6), 2.23% <30y (n=14), 9.06% were diagnosed as others (n=57) with 0.48% <30y (n=3) and 19.24% were normal (n=121) with 1.11% <30y (n=7). Diagnostic yield for colonoscopy for lower gastrointestinal bleed 71.7% for positive finding.

Conclusion

Due to high diagnostic yield for polyp or tumor for patients in this study; hence early colonoscopies were justifiable for patient who had per rectal bleeding.
A STUDY INTO THE DEMOGRAPHIC, CLINICAL SYMPTOMS AND ENDOSCOPIC ASSOCIATIONS OF HELICOBACTER PYLORI INFECTION IN PATIENTS ATTENDING SCREENING AT A MALAYSIAN DIAGNOSTIC CENTRE

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Objectives

This study looks into the demographic, clinical symptomatology and endoscopic findings associated with Helicobacter Pylori (HP) infection amongst a group of patients that attended for HP screening in a private medical centre. Methodology: 1780 patients who underwent HP testing at the private Centre, Life Care Diagnostic Medical Centre, were recruited into the study. The study period was between 2007 and 2008. Out of the 1780 patients, 422 (23%) tested positive for HP and their data subsequently analyzed. Results: In terms of demographic associations, rising age and male gender were significant risk factors for HP infection. Whilst there was a trend that showed an increasing risk of HP infection based on race (lowest and highest risk being Bumiputra and Indian respectively, it failed to reach statistical significance. In terms of symptoms, we found significant correlation between symptomatology and HP infectivity. From an endoscopic point, we found a significant correlation between peptic ulcer disease and HP infectivity. Conclusion: The association between HP infection and clinical symptoms remains a controversial issue. The results from this study support the notion that there is no association between HP infectivity and clinical symptoms. The results from the demographic risk factors are consistent with current worldwide data in which rising age and male gender are risk factors for HP infection. Other Malaysian studies have shown an association between infectivity and race, and whilst this study showed a similar trend, it was unable to reach statistical significance. This is probably due to racial bias of the patient cohort whereby Chinese made up the majority (93%) of the patients. Given a more equal racial distribution, we postulate that the result could reach statistical significance. As expected, the study showed an association between HP infection and peptic ulcer disease. The limitation of this study is, whilst done on Malaysians, was conducted in a single private diagnostic centre and therefore the results could not be generalized to the entire Malaysian population.
Adrenal hematoma is a rare condition and they are usually associated with trauma, tumors, septicemia, coagulopathy and pregnancy complications. The first description of adrenal hemorrhage after traumatic injury was reported in 1863 by Canton. Traumatic adrenal hematoma usually caused by blunt abdominal trauma and 80% are unilateral and commonly on right adrenal gland (85%).

A retrospective review and comparison of two patients who met with motor vehicle accidents sustaining left unilateral adrenal hematoma and was managed in operative and non-operative manner.

The first patient was a 26-year-old male who had a motor vehicle accident whereby he was hit and sandwiched between a lorry and a gate. He only presented with bruises over epigastric region with minimal pain. A contrast enhanced CT scan abdomen showed left adrenal hematoma with duodenal (D3 and D4) wall contusion. He was treated conservatively and was discharged home after 4 days of hospitalization.

The second patient was a 24-year-old female motorcyclist, involved in a hit-and-run accident. She had multiple injuries including isolated left adrenal gland hematoma which later bled actively requiring emergency laparotomy and adrenal gland repair within 24 hours of injury.

Isolated adrenal gland trauma without other intraabdominal organ injury is rare and it can present in a subtle way or it can be very severe and option of treatment varies from surgical exploration for hemodynamically unstable patients, non-operative observation and angioembolisation.

AIMS65 RISK ASSESSMENT AMONG PATIENTS PRESENTED WITH UPPER GI BLEEDING IN AMPANG HOSPITAL

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BACKGROUND

There were many risk stratification score used in upper GI bleeding, however not widely used due to its complexity. A simple bedside risk assessment score was developed and able to predict in-hospital mortality, length of stay and cost in patients with acute upper GI bleeding.

OBJECTIVE

The main objective of this study is to look into differences in patients’ presentations and gastroscopy findings according to AIMS65 risk assessment score among patients presented with upper GI bleeding to Ampang Hospital.

METHOD

Our study population involved all patients who presented to emergency department with acute upper GI bleeding from Jan 2012 to April 2012. We used AIMS65 risk assessment score, which was based on albumin level, international normalized ratio, mental status, systolic blood pressure and age of patients at presentation. Score < 2 was grouped to low-risk group and score ≥ 2 was grouped under high-risk group. Patients were then underwent gastroscopy and findings were recorded.

RESULTS

A total of 43 patients were collected. Mean age was 66 years old, 31 male and 12 female, Chinese 51.2%, Malay 34.9%, Indian 9.3% and others 4.7%. 27 patients (60.5%) were scored into low-risk group, and 16 patients (39.5%) under the high-risk group. In low-risk group, the mean hemoglobin upon presentation was 8.7g/dl and mean length of stay was 5.5 days. 61.5% of patients in low-risk group shown to have Forrest III on gastroscopy, 11.5% gastric erosions, 11.5% Forrest IIa and 3.8% Forrest Ib. 2 in-hospital deaths were noted in the low risk group. In high-risk group, mean hemoglobin was 7.2g/dl and mean length of stay was 7.5 days. Gastroscopy findings were 41.2% Forrest III, 17.6% Forrest IIa and 11.8% for gastric erosions, carcinoma and esophageal varices. The incidence of Forrest IIa is higher in the high-risk group compared to the lower risk group.

CONCLUSION

We conclude that, AIMS65 risk score is a precise and simple scoring system to identify high-risk patients and ability to predict severity of upper GI bleeding as well as length of hospital stay.
Introduction and Objectives
Gastrointestinal tumours [GISTs] are the most common of mesenchymal tumours and approximately 70% of gastrointestinal GISTs occur in the stomach. We present a single institution’s experience with a total of 24 patients who presented with gastric GISTs.

Methods
A retrospective review of a prospectively maintained database was performed. All patients diagnosed with gastric GISTs over a 10 year period [2002 – 2012] were reviewed and analysis of the patient and tumour characteristics was performed. Tumours were classified according to Fletcher’s classification for risk of malignant behavior.

Results
A total of 24 patients diagnosed with gastric GISTs. The mean age of patients in our series was 62.9 years (range 31 -85) with a female to male ratio of 1.4:1. Chinese were the majority with 37.5% followed by Malays. Most of these patients presented with bleeding and most of these tumors were located at the fundus of the stomach (35.3%). The mean diameter was 7.57cm (range 1.5 to 16 cm). In our series, most patients had tumours with mitotic rates less than 6 per 50 high-power field (hpf). Eighty percent of patient were categorized as having GISTs with either intermediate or high malignant potential. However, in our series only one patient proceeded to have metastatic disease. Seventeen patients underwent surgical resection of which 7 were laparoscopic.

Conclusion
Malignant behavior doesn’t always correlate with size or mitotic activity. In our population, GISTs less than 4 cm are rarely detected as most patients present with symptoms. As a whole, GISTs remain largely misunderstood tumours where the behavior is unpredictable and clear surgical margin is the most important factor in avoiding recurrence.
Objectives

To evaluate the efficacy of inpatient bowel preparation for colonoscopy using same day dosing versus split day dosing of Polyethylene Glycol (PEG). Methods: Inpatient colonoscopies were randomized to receive same day or split day dosing of PEG. Same day dosing patients completed 1 L of PEG solution at 4pm, 5pm and 6 pm. Split day dosing patients consumed 1 L of PEG solution at 4pm, 6pm and 6 am on the day of procedure. Blinded Endoscopists then assessed the adequacy of bowel preparation using the Boston Bowel Preparation Score (BPPS) assessment and patient’s feedback was obtained using the Aronchick questionnaire. Results: To date, 71 patients were enrolled with 69 patients included in the study. Median age of patients was 62 years with 54% of male patients with equal diabetic and hypertensive patients randomized in both arms. In the split day dosing arm, total average BPPS score was 6.38 and scores in the right, transverse and left side of the colon were 1.93, 2.21 and 2.26 respectively. In the same day dosing arm, average total score was 4.11 with individual scores of the right, transverse and left colon being 0.93, 1.50 and 1.68 respectively. A maximum total BPPS score of 9 indicates excellent preparation and each colon segment is scored from 0-3. Split dosing produced an average caecal intubation time of 13.05 minutes, withdrawal time of 7.58 minutes and total colonoscopy time of 28.34 minutes with successful terminal ileum intubation in 87%. Same day dosing produced an average caecal intubation time of 19.31 minutes, withdrawal time of 6.88 minutes and total colonoscopy time of 37.35 minutes with successful terminal ileum intubation in 79%. Discussion: Significant differences between different bowel preparation arms appear to favour the split dosing arm. Conclusion: Split dosing of PEG solution should be considered in all in-patient bowel preparation for colonoscopy.
Case Report

A 54-year-old Malay man was diagnosed with Classical Hodgkin’s Lymphoma stage IVB. He presented with cervical and axillary lymph node swelling for 2 months associated with significant weight loss (56kg to 48kg). Other constitutional symptoms of lymphoma were absent. He was treated with chemotherapy ABVD regime. His condition improved significantly with stable weight at 49kg. However, since mid December 2011, he lost 9kg, to 40kg on 18/1/2012. CT scan on 25/1/2012 showed marked improvement of lymph nodes sizes to subcentimeter at cervical, axillary and abdominal lymph nodes. He had one episode of intestinal obstruction in mid January 2012, which resolved without surgical intervention.

He was admitted for chemotherapy on 19/1/2012. He developed pantocypenia, and was treated with s/c neupogen. After 2 weeks, his white blood cells and platelets recovered except haemoglobin. No obvious GI bleeding was noted. An oesophageoduodenoscopy was done on 13/2/2012. It showed significant inflammation, oedematous mucosa and multiple small superficial ulcers at D1 and D2.

Duodenal biopsy revealed adult worms and larvae of Strongyloides species.

He was treated with T. Albendazole 400mg bd for 5 days. However, he developed severe sepsis, respiratory failure and significant gastrointestinal bleeding.

He passed away due to severe bleeding and disseminated intravascular coagulation.

Discussion

Disseminated strongyloidiasis can occur in lymphoma patients on chemotherapy. Screening before initiating chemotherapy is important. Hyperinfection syndrome carries high mortality rate in immunocompromised state (60%-85%). Gastrointestinal bleeding due to strongyloidiasis can be difficult to treat.

Disseminated strongyloidiasis requires treatment until the parasite can no longer be identified in clinical specimens for at least 2 weeks. Ivermectin should be the treatment of choice as it has been shown to be superior to albendazole.
Teratomas are rare germ cell neoplasms that occur mainly in the testes or ovaries. Their occurrence in the neck is rare, which accounts for about 5% of all teratomas. We report a cervical teratoma in an adult masquerading as thyroglossal cyst. An 18-year-old man presented with a four months history of progressive anterior neck swelling. There was no dysphagia, shortness of breath and hoarseness of voice. He had no previous history of surgery or irradiation to his neck. Clinically, he was euthyroid. Clinical examination showed a firm oval-shaped mass with a smooth surface over the anterior neck, which measured 4x5cm and appeared to move with swallowing and protrusion of tongue. There were no palpable cervical lymph nodes. The rest of the physical examinations were unremarkable. Ultrasound neck findings were unremarkable except for multiple nodules in the left thyroid gland. Preoperative vocal cord assessment was normal. A preliminary diagnosis of thyroglossal cyst with left thyroid nodules was made based on the clinical and ultrasound findings. A collar neck incision with subsequent neck exploration noted a lobular mass densely adherent to the pretrachea fascia and extending down to the retrosternal area. It has a stalk that extended superiorly to the hyoid bone. Thyroid gland was noted to be normal. Histopathological examination of the specimen confirmed mature cervical teratoma. Patient was discharged uneventfully first day after surgery. At 6th month of follow-up, no local recurrence was observed.
CLINICAL AND HISTOLOGICAL FOLLOW-UP OF A COHORT OF PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD)

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Objectives
To elucidate the natural history of NAFLD and to identify factors associated with NAFLD progression

Methodology: Attempts were made to contact 75 NAFLD patients who had undergone liver biopsy for a previous study. Patients who were contactable and who agreed for repeat liver biopsy were included. Baseline demographic and anthropometric data and relevant clinical and laboratory data were obtained using a standard protocol. The Global Physical Activity Questionnaire (GPAQ) and a 24-hour dietary recall were used to assess physical activity and dietary intake, respectively. Dietary data was analyzed using Nutritionist Pro Version 2.4.1. Insulin resistance was calculated using Homeostatic Model Assessment (HOMA). Paired liver biopsies were graded and staged according to the Non-Alcoholic Steatohepatitis Clinical Research Network Scoring System. Six patients with cirrhosis on previous liver biopsy were not subjected to repeat liver biopsy.

Results
Thirty-nine patients had the repeat liver biopsy (Figure 1). Data for 21 patients were ready for analysis. Mean age of studied patients was 57.8 ± 11.0. Mean interval between the two liver biopsies was 2343 ± 265 days. Histology had worsened in 12 patients, and had improved or not changed in 9 patients. There was a trend towards increased body mass index (BMI) and waist circumference (WC) in the former and decreased BMI and WC in the latter but these were not statistically significant. On univariate analysis, patients with worsened histology had higher ALP, GGT, total cholesterol, LDL and TG levels during follow-up, and lower dietary fat intake below the recommended daily intake level. Other factors were not associated with histological changes. Two out of 6 patients with cirrhosis on previous liver biopsy had decompensation.

Conclusions
A substantial proportion of NAFLD patients experienced clinical and histological progression. Further studies with larger group of patients are needed to identify modifiable factors associated with such progression.
CLINICAL OUTCOME AND ADHERENCE TO LOCAL GUIDELINE ON THE MANAGEMENT OF BLEEDING PEPITC ULCER AT KUALA KRAI DISTRICT HOSPITAL, KELANTAN IN 2011
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Objectives
Primary objective of the study is to review percentage of endoscopy done within 24 hours of admission and the use of high dose PPI (proton pump inhibitor) infusion as an adjuvant therapy for high risk ulcers. Secondary objectives are to determine type and aetiology of ulcers, rate of re-bleeding, in-hospital mortality and surgical intervention required.

Methods
We retrospectively reviewed all patients presented with bleeding peptic ulcer (PU) from January to December 2011. Parameters assessed were demographic data, duration of upper endoscopy, comorbidities, aetiology and type of ulcers, rate of PPI infusion, re-bleeding, mean hospital stay and mortality.

Results
Out of 94 patients presented with upper GIT bleeding in 2011, 55 patients were due to bleeding PU. Mean age was 66 year old with majority were male (M:F ; 44:11). Urgent endoscopy was done within 24 hours in 60% of them. High dose PPI infusions were given as required in 87% of cases (14 out of 16 indicated patients). 23% (13 patients) of them had major comorbidities and only 22 patients (40%) were medically fit. Commonest type of ulcers seen were Forest III (26 cases, 47%) followed by IIC (11 cases, 20%). 40% of ulcers were thought due to non-steroidal anti inflammatory (NSAIDS) drugs or aspirin. Majority of them were unknown aetiology (30 patients; 54.4%). 3 patients (5.5%) re-bled following endoscopic intervention and one of it (1%) required a laparotomy but fortunately, there was no mortality and mean hospital stay was 5 days.

Conclusion
Bleeding PU is the commonest cause of upper GI bleeding at our center. Majority (60%) of the endoscopy were done within 24 hours of admission and nearly all received PPI infusion as advocated by our CPG. Majority of the ulcers seen were in low risk type (Forest III and IIC: 67%) and our re-bleeding rate was only 5.5% with no mortality.
Introduction
Colonoscopic is a diagnostic and therapeutic procedure for colonic diseases.

Objective
The objective of this retrospective study is to identify the pattern of colonic pathology in patient above 50 years old.

Methodology
Retrospective data review of all colonoscopy from 2006 till 2010 for patients above 50 years old. Surveillance colonoscopy data is the exclusion criteria.

Results
Total colonoscopy procedures done in Hospital Tuanku Ja’afar from 2006 till 2010 were 2446. Among them 1401 procedures full filled this study criteria. Average age of patient in this study is 65.5 years old. The patients compromised male 792 patients (56.4%) and female 609 patients (43.6%). Among them Chinese were the commonest 571 patients (40.8%), Malay 522 patients (37.3%), and Indian 292 patients (20.8%). 51.2% of patients had good bowel preparation for the procedures and complete examination till the cecum is possible in 71.4% of patients. The common presentations were per rectal bleed 30.8% (432 patients) and followed by altered bowel habit 26.5% (371 patient). Data of indications for the scope not found in the 5.8% of patients. Pathological findings were identified in 67.8% of completed colonoscopy. The common pathology were polyp (22.8%), growth (12.1%) and diverticulum (11.7%). 33.6% colonic pathology found in left colon and followed by 27.1% in rectum. The pathological site not documented in 2.7% of patients. Among the patients presented with per rectal bleed, 23.6% had polyp, 14.1% had diverticulum and 10.4% found colonic growth. Among the indications for the scope, 38.8% of altered bowel habit, 41.9% of constipation and 46.5% of abdominal pain patients noted to have no pathology.

Conclusion
Colonoscopy is a rewarding procedure in those patient 50 years old and above and presenting with per rectal bleed, altered bowel habit, constipation and abdominal pain.
Background
We described a case of advanced metastatic breast cancer presented with compressive symptoms secondary to abnormally dilated rectum with distal circumferential wall thickening consistent with linitis plastica of the rectum.

Case Report
A 30-years-old housewife presented with one week history of fever associated with symptoms of urinary tract infection. She had left invasive ductal breast carcinoma and underwent left mastectomy with axillary clearance a year ago. However, she was then lost to follow-up. Per abdomen examination revealed a 20-cm supra-pubic mass. Blood investigations showed leucocytosis with hypercalcaemia. Computed tomography (CT) scan of the abdomen showed rectal wall thickening with prominent proximal dilatation. There were also paraaortic lymphadenopathy, multiple liver secondaries and lytic lesions of the lower thoracic vertebra. A diagnosis of metastatic linitis plastica of the rectum was made and the patient was treated conservatively.

Discussion
Linitis plastica refers to a condition whereby there is diffuse proliferation of the connective tissue of a hollow organ, resulting in a constricted, inelastic and rigid structure. Rectal linitis plastic is a rare entity with poor prognosis. It can be a primary tumour, or secondary to gastric linitis or a metastatic form of breast or prostate carcinomas. Diagnosis is difficult because of non-specific clinical and endoscopic findings with frequent negative biopsies. The main invasion route was hematogenous. Alternatively, tumours may spread intramurally through lymphatic channels. CT typically showed nonspecific concentric bowel wall thickening. The main limitation of CT is that it does not have the resolution to show the individual layers of the rectal wall. CT may, however, show other features indicative of malignancy, including ascites, peritoneal and omental infiltration, lymphadenopathy, and metastases elsewhere. Thus CT has limitations in staging and detection of early lesions but has high sensitivity in detecting Duke stage D lesions. Magnetic resonance imaging, with external body coils, tends to have similar limitations.

Conclusion
Metastatic linitis plastica to the rectum should be considered when CT shows a long segment of circumferential rectal wall thickening in a patient suspected to have advanced cancer.
PP 19

DIAGNOSTIC ACCURACY OF EUS-FNA WITH ON-SITE CYTOENGINEERS TRAINED IN GENERAL CYTOLOGIC WORKS

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Introduction
Endoscopic ultrasound fine needle aspiration (EUS-FNA) has been widely used in the management of pancreatic lesions. The presence of on-site cytopathologist has been lauded as core of high accuracy in EUS-FNA. However, on-site cytopathologist may not always be available. Our aim is to retrospectively review the sampling adequacy, and diagnostic accuracy of EUS-FNA for pancreatic lesion with on-site cytotechnicians in our center.

Methodology
Cytotechnicians had received 6 months training in general FNA cytology for sampling adequacy with exit exam and two yearly competency re-assessment. Clinical case notes and electronic records of patients who had EUS-FNA at Endoscopy Center, National University of Malaysia were reviewed. Indication of EUS-FNA, patient demographics, EUS findings, cytologic results and follow-up data were abstracted. Final diagnosis was derived according to patient’s final outcome based on the disease progression over one year duration. Final clinical diagnosis and cytologic finding was categorized as benign and malignant. Indeterminate cytology was also categorized as benign. By comparing cytopathologic diagnosis of FNA with final diagnosis sensitivity, specificity, and accuracy were determined

Results
A total of 34 EUS-FNAs were performed in 28 patients. All the samples were reported to be adequate for cytologic assessment by on-site cytotechnicians. From the patients’ clinical progression and final diagnosis, 16 patients had benign disease and 18 patients had malignant disease. Only 3 patients has histopathologic diagnosis confirmation via surgery. However, only 9 cases were found to be malignant and inadequate sampling was noted in 10 cases. Based on the sampling adequacy of on-site cytotechnicians, sensitivity of our EUS-FNA to detect malignancy was 44.4% and specificity for benign pancreatic lesion was 93.8%. Overall accuracy for our EUS-FNA was 67.6%. Positive predictive value (PPV) was 88.9% with negative predictive value (NPV) of 60.0%. Accuracy of the sampling was 67.6%. With exclusion of these cases, the revised sensitivity was 80.0%, specificity 93.5%, PPV 88.9% and NPV 86.7%. The accuracy of sampling with cytopathologist was 87.5%.

Conclusion
A formal training in cytologic sampling adequacy for pancreatic lesion is required for cytotechnicians assisting in EUS-FNA related pancreatic works.

Key words
Endoscopic ultrasound, Fine needle aspiration, Pancreas
PP 20

DIAGNOSTIC ACCURACY OF M2PK – A NEW IMMUNOCHROMOTOGRAPHIC TESTING FOR COLORECTAL CARCINOMA (CRC) SCREENING: PRELIMINARY RESULTS

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Background
Colorectal cancer (CRC) is a fast rising cancer in the Asia-Pacific region. Many methods have been used to screen for CRC. These include faecal occult blood test (FOBT), faecal DNA testing & colonoscopy. The M2 isoenzyme of pyruvate kinase (M2PK) is an enzyme where abnormal oncogenic protein (enzyme) is shed from colorectal cancers and has been shown to be useful in the diagnosis of CRC.

Objective
The aim of this study is to determine the diagnostic accuracy of this method in screening of CRC.

Methods
Patients with histologically confirmed CRC were recruited into this study. A control group with a normal colonoscopy was recruited with a ratio of 1:2 (cancer: control = 1:2). All patients underwent colonoscopy. Colonoscopy to date is the Gold Standard for screening of CRC.

The sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) & diagnostic accuracy were calculated. Results presented as percentage with 95% confident interval.

Results
Preliminary result of this on-going study on 25 patients with CRC and 50 controls are as shown below.

<table>
<thead>
<tr>
<th>M2-PK test</th>
<th>Colonoscopy results</th>
</tr>
</thead>
<tbody>
<tr>
<td>positive</td>
<td>CRC 21, No-CRC 1</td>
</tr>
<tr>
<td>negative</td>
<td>CRC 4, No-CRC 49</td>
</tr>
</tbody>
</table>

Sensitivity = 21/25, 84.0% (95% CI 65.8-94.7)
Specificity = 49/50, 98.0% (95% CI 90.5-99.9)
Positive predictive value = 21/22, 95.5% (95% CI 79.7-99.8)
Negative predictive value = 49/53, 92.5% (95% CI 82.8-97.6)
Diganostic Accuracy = 93.3% (95% CI 85.8-97.5)

Conclusion
The M2PK screening tool is a highly sensitive and specific test for screening of CRC.
Introduction

Hepatic hemangiomas (HH) are the most common benign liver tumors (5-20%). Most HH are small and require no treatment or only follow-up. Giant HH with diameter more than 4 or 5 cm, may give rise to symptoms or coagulopathy requiring intervention.

Case report

A 64-years-old Malay lady presented right hypochondrial pain, loss of weight and appetite. On examination noted hepatomegally (4-5 cm) and other examinations were unremarkable. Patient’s routine investigations, viral-screening and tumor-markers were normal. The Ultra-sonography (USG) of the Hepato-biliary-systems (HBS) showed segment seven and eight lesion with impression of hepatocellular carcinoma (HCC) or metastasis. Proceeded with 3-phase CT-scan of liver, reported large mass in segment VII and VIII (9.5 x 13 x 13 cm and 4.4 x 8.1 x 5.7 cm respectively) with calcification. Large mass in the right lobe of liver with hemorrhagic component demonstrated peripheral arterial enhancement with branching feeding vessels from portal vein. The CT scan conclusion were HCC or benign lesion. For conformation we proceeded with Gadolinium enhanced MRI, the liver masses were hypo intense in pre-contrast and arterial phase homogeneous enhancement post gadolinium at one minute with persistent enhancement in venous phase. MRI confirmed the diagnosis of Multiple Giant HH.

Discussion

It remains uncertain whether follow-up radiologic studies are warranted to reassess the size of the tumor. We planned patients ultrasonography at 6 months and at 12 months after the initial diagnosis. Providing that no change in hemangioma size has occurred, long-term follow-up radiologic studies are probably not necessary. If the patients develops a new onset of abdominal pain deserve a follow-up imaging study. Giant HH (>10 cm) may deserve long-term follow-up radiologic studies, perhaps annually, because of their probable increased risk of complications. This patient was managed conservatively.

Conclusion

The diagnosis of HH was confirmed with Gadolinium enhanced MRI combine with dynamic CT as this increases the diagnostic sensitivity to 100%. USG (sensitivity 46%), good tool for screening and follow-up study.
PP 22

ARTERIAL EMBOLIZATION OF A BLEEDING GASTRIC DIEULAFOY LESION: A CASE REPORT

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Dieulafoy’s lesion is one of an unusual cause of upper gastrointestinal bleeding (UGIB). Endoscopic intervention has always been a preferred non-surgical method in treating UGIB including bleeding from Dieulafoy’s lesion. Owing to recent advances in angiography, arterial embolization has become a popular alternative in non- variceal UGIB especially in cases with failed endoscopic treatment. However, managing bleeding Dieulafoy’s with selective arterial embolization as the first line of treatment has not been exclusively practiced. We hereby, report a case of bleeding Dieulafoy lesion which had been primarily treated with arterial embolization.

Keywords
Dieulafoys lesion, gastrointestinal bleeding, angiography, arterial embolization.
PP 23

ENDOSCOPIC ULTRASOUND-GUIDED RADIOFREQUENCY ABLATION OF PORCINE PANCREAS

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Background
Radiofrequency ablation (RFA) might be utilized as a useful adjunct for the treatment of locally advanced pancreatic cancer as ablative treatment guided via endoscopic ultrasound (EUS) could provide be the easiest method for delivery of such therapy. However, its translation into clinical practice has been restricted due to limited data and high procedure-related risk.

Objective
To evaluate the feasibility, efficacy and safety of EUS-guided RFA (EUS-RFA) in normal porcine pancreas

Design
Prospective endoscopic experimental study in a porcine model.

Setting
Tertiary referral center animal laboratory.

Intervention
EUS-RFA of the pancreas was attempted on 10 adult mini pigs. An 18-gauge endoscopic RFA electrode was used to puncture the body and tail of the pancreas with an output power of 50W for 5 minutes.

Main outcome measures
The feasibility, efficacy and safety of EUS-RFA.

Results
A spherical necrotic lesion surrounded by fibrous tissue localized in the pancreatic parenchyma was observed on histopathological examination. The mean diameter of the ablated tissue was 23.0 ± 6.9 mm. No major procedure-related complications were noted and all pigs survived without any distress behavioral pattern for 7 days until autopsy.

Limitations
Small sample size with short-term observation and the lack of evaluation of the head of pancreas

Conclusion
EUS-RFA of the pancreatic body and tail was feasible, effective and relatively safe in a porcine model. More animal studies to assess damage to adjacent organs are required before human trials can be conducted.

Key words
Endoscopic ultrasound, Radiofrequency ablation, Pancreas, Pancreatic cancer
EOSINOPHILIC GASTROENTERITIS / COLITIS WITH EXTENSIVE SYSTEMIC INVOLVEMENT: AN UNUSUAL AND OVERLOOKED CAUSE OF UNRESOLVED DIARRHOEA

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Methodology
Case Report
We report a case of a 22 year old Malay staff nurse with background history of asthma and atopy with 6 months of unresolved diarrhoea and vomiting associated with purpuric rashes, bilateral pleural effusion, ascites and peripheral hypereosinophilia. Full blood picture was consistent with absolute hypereosinophilia. Blood and stool culture showed no growth. Skin biopsy taken showing scattered eosinophilis. Bone marrow aspiration and trephine biopsy performed showed increased number of eosinophils and its precursors. Bidirectional endoscopy performed and multiple biopsy taken showed eosinophills infiltration >20 per high power field.

Patient was started on oral Prednisolone 30mg daily for 2 weeks and tapered accordingly.

Results
Significant reduction of peripheral blood eosinophil count with dramatic clinical improvement and repeat scans showing resolution of serositis.

Discussion
Eosinophilic gastritis is a rare disorder. The disease is characterized by eosinophilic infiltration of one or more areas of GI tract in the absence of any known cause of eosinophilia. Depending upon the area involved, the disease can present as eosinophilic oesophagitis, eosinophilic gastritis (EG), eosinophilic gastroenteritis (EGE) or eosinophilic colitis. A variety of treatment regimens have been used with varying degree of success with steroids being the mainstay of treatment. Goals of treatment are aimed at symptomatic improvement and histological improvement. The long term prognosis of the disease has not been clearly documented, however it tends to be a chronic waxing and waning disorder.

Conclusion
Eosinophilic gastritis / colitis is a rare disorder and can present with a variety of symptoms and a high index of suspicion is required in patients presenting with uncharacteristic symptoms or unresponsive to conventional therapy.
**EPIDEMIOLOGY OF INFLAMMATORY BOWEL DISEASE IN MALAYSIA – THE FIRST INCIDENCE AND PREVALENCE STUDY**

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**Introduction**

Inflammatory bowel disease (IBD) is known to be rare in the Asia Pacific region but true data on the incidence and prevalence of this condition in many countries in this region remains limited. To date, there is no epidemiological study looking at the incidence and prevalence of this disease in Malaysia.

**Methodology**

This study is part of a large collaboration to study the epidemiology of IBD in Asia (ACCESS study). For Malaysia, Kinta Valley (Ipoh) was chosen as the catchment area. The population of Kinta Valley was obtained from the Department of Statistics Malaysia 2010 Census including gender and ethnic breakdown. Four major hospitals in Ipoh that covers most of the population were selected. New cases (confirmed Kinta Valley residents) from these hospitals were captured and followed up for one year. For the prevalence study, all existing cases (confirmed residents) under follow up were recruited. Baseline demography and clinical characteristics were recorded.

**Results**

Five new cases of IBD were diagnosed from April 2011 to April 2012; 3 ulcerative colitis (UC) and 2 Crohn’s disease (CD). The incidence of IBD, UC and CD respectively were 0.59, 0.35 and 0.24 per 100,000 person-years. The highest incidence was among the Indians, 2.46 per 100,000 person-years compared to 0.35 and 0.24 per 100,000 person-years among the Malays and the Chinese respectively.

The prevalence of IBD, UC and CD respectively were 7.63, 5.16 and 1.88 per 100,000 persons. The highest prevalence was also among the Indians; 22.13 per 100,000 persons compared to 6.92 and 4.58 per 100,000 persons. There was no marked gender predominance; males 9.88 per 100,000 persons, females 7.73 per 100,000 persons.

**Conclusions**

The incidence and prevalence of IBD is low in Malaysia, with UC being more prevalent than CD. This study confirms previous observations that the disease is predominantly seen in Indians.
ESOPHAGEAL CANCER IN THE MALAYSIAN POPULATION
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Background
Esophageal cancer is the eighth most common cancer in the world (2008); however our understanding of
the disease is still limited. It is known to affect certain ethnic groups disproportionately. The observations
are important because of potential contributions to understanding the pathogenesis and risk factors of the
cancer.

Method
Retrospective review of 63 patients diagnosed with esophageal cancer at a major public hospital in
Malaysia. The age, gender, incidence, site of cancer and histology were analysed by ethnicity.

Results
The male/female ratio is 1.54. However, the male/female ratio reported for adenocarcinomas (AC) is 2.11
while ratio for squamous cell carcinoma (SCC) is 1.06. Mean age for AC is 67.71 years while for SCC is
66.38 years.

Indians had the highest incidence of oesophageal cancer in both males (n=18) and females (n=18).
Indians were the highest to be diagnosed with both AC and SCC (57.14%), followed by Chinese (25.40%)
and Malay (17.46%).

Adenocarcinoma was found most in the lower third (89.29%) with highest incidence in Indians (17.46%)
followed by Chinese (12.7%) and Malay (11.11%).

Squamous cell carcinoma was found mostly in lower esophagus (42.86%), followed by upper esophagus
(34.29%) and middle esophagus (22.86%). Indians were found to have highest incidence in lower third
(15.87%).

Conclusion
There are major disparities in incidence, histology and location of tumour among the ethnic groups in
Malaysia. The data support the need for research on the risk factors and prevention of esophageal cancer
in the country.
Esophageal achalasia is a rare neurodegenerative disease of the esophagus and the lower esophageal sphincter that presents within a spectrum of disease severity related to progressive pathological changes, most commonly resulting in dysphagia. Therapies include pharmacological therapy, endoscopic injection of botulinum toxin, endoscopic dilation, and surgery.

We report a case of achalasia in a 38 year-old lady, who presented with progressive dysphagia for 6 months. Diagnosis was confirmed with barium esophagogram and esophagogastroduodenoscopy. We subjected her for laparoscopic Heller myotomy and partial fundoplication after unsatisfying result of multiple endoscopic dilatations performed on her. Post operatively she recovered well and was discharged. Upon follow up, her symptoms very much improved as well as her quality of life.

The laparoscopic Heller myotomy with partial fundoplication performed at an experienced center is currently the first line of therapy because it offers a low complication rate, the most durable symptom relief, and the lowest incidence of postoperative gastroesophageal reflux.
FORWARD-VIEWING EUS-GUIDED NOTES INTERVENTIONS: A STUDY ON PERITONEOSCOPIC POTENTIAL
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Background
Forward-viewing endoscopic ultrasound (FV-EUS) is an ergonomic and viable endoscopic modality to perform transgastric (TG) peritoneoscopic interventions via natural orifice transluminal endoscopic surgery (NOTES).

Objective
To evaluate the technical feasibility of diagnostic and therapeutic TG peritoneoscopic interventions with a FV-EUS.

Design
Prospective endoscopic experimental study in an animal model.

Setting
Tertiary referral center animal laboratory.

Intervention
Combined TG peritoneoscopic interventions and endoscopic ultrasound (EUS) examination of the intra-abdominal organs were performed using a FV-EUS on 10 animal models (1 porcine and 9 canine). The procedures carried out include EUS evaluation and endoscopic biopsy of intraperitoneal organs, EUS-guided fine needle aspiration (EUS-FNA), EUS-guided radiofrequency ablation (EUS-RFA) and argon plasma coagulation for hemostatic control.

Main outcome measures
The feasibility of FV-EUS in NOTES peritoneoscopic interventions

Results
In all 10 animals, TG peritoneoscopy followed by endoscopic biopsy for the liver, spleen, abdominal wall and omentum were performed successfully. Argon plasma coagulation was beneficial to control minor bleeding. Visualization of intra-abdominal organs with real-time EUS was accomplished with ease. Intraperitoneal EUS-FNA was successfully performed on the liver, spleen and kidney. Similarly, a successful outcome was achieved with EUS-RFA of the hepatic parenchyma. No adverse events were recorded during the study.

Limitations
Small sample size with short-term observation period.

Conclusion
Peritoneoscopic NOTES interventions using a FV-EUS were feasible in providing EUS evaluation and in performing EUS-FNA, EUS-RFA and endoscopic biopsy of various intra-abdominal organs from the peritoneal cavity. It promises immense potential as a platform for future EUS-based NOTES procedure.

Key words
Forward-viewing EUS, Peritoneoscopy, Natural orifice transluminal endoscopic surgery
FACTORS AFFECTING TUMOR ABLATION DURING HIGH-INTENSITY FOCUSED ULTRASOUND TREATMENT

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BACKGROUND & AIMS

High-intensity focused ultrasound (HIFU) utilizes targeted extracorporeal focused ultrasound beam to ablate neoplastic pancreatic tissue. However, the presence of bone, stents or cystic lesions may affect ultrasound beam penetration. We used an in-vitro model to examine the effects of bone, metallic stent, plastic stent, metal plate and cyst-like lesions on HIFU treatment.

METHODS

We constructed a phantom model using polyacrylamide gel mixed with 9% bovine serum albumin (BSA) into which we inserted bone fragments, a nitinol-covered metal stent, plastic stent, metal plate or cyst-like water balloon to simulate in-vivo conditions. HIFU was delivered at the phantom models implanted with these foreign bodies and the location, shape and size of the ablated zones were evaluated.

RESULTS

Ultrasound beam penetration was affected by the presence of bone, plastic stent, cyst-like lesion, metal stent and metal plate. Bone and metallic plate reflected the ultrasound beam shifting the ablation zone from the focal zone to the pre-focal area. In phantoms containing metal stent, plastic stent and cyst, most of the ablative energy was reflected on the surface to the pre-focal area, with the remainder penetrating through. The final area of the ablated margins was significantly larger in size and volume than the intended focal ablation zone.

CONCLUSIONS

During HIFU therapy, artificial or anatomical barriers could affect the direction of the ultrasound beams shifting the ablation zone from the focal area to a pre-focal site with a larger ablation zone than expected. These factors should be considered prior to HIFU treatment for pancreatic tumors as it could limit ablation success apart from avoiding potential complications.

Key words
Pancreatic neoplasm, High intensity focused ultrasound ablation
Background
Surgical treatment of patients with achalasia of the esophagus results in dramatic and permanent relief in 90% of patients. Though surgery relieves esophageal achalasia better than pneumatic dilatation, but for some pneumatic dilatation is still the most effective non surgical treatment option.

Aim
To compare achalasia symptoms before and after Heller’s cardiomyotomy and Dor’s fundoplication.

Methods
A prospective cohort study of patients who underwent Heller’s cardiomyotomy and Dor’s fundoplication for achalasia cardia at HTJS from July 2007 to November 2011 was included. Both pre-operative and post-operative data regarding dysphagia, regurgitation and chest pain and overall patient satisfaction were gathered.

Results
Total of 10 patients included in this cohort. 8 of them had Laparoscopic Heller’s cardiomyotomy and Dor’s fundoplication, 1 of which had to be converted to open and 2 had open Heller cardiomyotomy and Dor’s fundoplication. 2 of them required a repeat balloon dilatation for symptom recurrence. Median follow up was 31.5 (range 4-56) months. Patients having a repeat procedure (balloon dilatation) were instructed to evaluate symptoms with respect to their initial cardiomyotomy. 2 of them had subsequent balloon dilatation for symptom recurrence. Overall symptoms score (measured using an analog scale) decreased for all patients, with mean pre operative and post operative value of 24.1 and 3.4 respectively. All patients were highly satisfied with the surgery and would chose to have the surgery again given the satisfactory outcome.

Conclusion
Heller’s cardiomyotomy and Dor’s Fundoplication appears to be effective and satisfactory in alleviating symptoms of achalasia.
HEPATIC VENOUS PRESSURE GRADIENT MEASUREMENT:
SELAYANG HOSPITAL EXPERIENCE
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Background
Hepatic venous pressure gradient (HVPG) is assessed by measuring the wedged hepatic venous pressure (a measure of sinusoidal hepatic pressure) and subtracting the free hepatic venous pressure (systemic pressure). A normal HVPG is 3-5 mmHg. HVPG of 10 mmHg or greater defines clinically significant portal hypertension (PH) as this pressure gradient predicts clinical course in patients with liver cirrhosis (LC) including development of varices, clinical decompensation (i.e. development of ascites, variceal hemorrhage (VH) and encephalopathy), decompensation or death after liver resection, and hepatocellular carcinoma. HVPG measurement is considered invasive and its availability is limited to centres with expertise.

Objective
To present our experience in assessing HVPG.

Methodology
Data of patients who underwent HVPG measurements were extracted from the hospital electronic records.

Results
Thirty two HVPG measurements were performed between March 2011 and May 2012. Indications for HVPG measurements were for monitoring of beta blockade (BB) response in patients on secondary prophylaxis (SP) against VH (84%), diagnosis of PH (9%) and prognosticating of PH (6%). Patients were 51 ± 11 years of age and 64% were males. Main causes for LC were chronic hepatitis B/C infection (32%), probable non alcoholic steatohepatitis (NASH; 29%) and combination of chronic viral hepatitis with NASH/alcoholic liver disease (14%).

Twenty six (81%) successful HVPG measurements were obtained. Reasons for failure were inability to cannulate the internal jugular vein in 3 (9%) patients and the hepatic veins in another 3 (9%) patients. Only 1 (3%) patient developed complication, a carotid artery puncture, which was easily managed.

Twenty one HVPG measurements were for monitoring of BB response and in 13 (62%), HVPG were > 12mmHg, indicating inadequate BB response. HVPG in these patients were 16±2mmHg with propranolol doses of 80-28mg daily.

Discussion and Conclusion
HVPG measurement is a relatively safe procedure. More than half of those patients on SP are not achieving target HVPG to prevent VH. HVPG measurement is useful and should be included in the management of patients with PH.
Introduction

Gastrointestinal stromal tumour (GIST) most commonly arises from the stomach and presents as a mass lesion or an occult gastrointestinal (GI) bleeding that can be easily diagnosed by performing a gastroscopy. However, diagnosis of jejunal GIST is commonly delayed because of the difficulty in accessing the lesion on routine endoscopy investigations for GI bleeding.

Objective

To highlight the common presentation and early diagnostic dilemma for jejunal GIST.

Method

We report three cases of jejunal GIST presented with acute obscure GI bleeding between September 2011 and April 2012 to HSAJB and HTJS.

Results

Three patients, age between 47 to 50 years old male patients, had multiple hospital admissions for GI bleeding (malaena). All patients had upper and lower endoscopy performed on admission. No source of GI bleeding was found in 2 patients and contrast enhanced CT (CECT) was performed as outpatient. Another patient had active bleeding per rectal and initial colonoscopy noted clots in the entire colon until caecum with multiple ascending colon diverticulosis. All patients had CECT done which showed heterogenous mass arising from the small bowel. Small bowel resection and primary anatomosis was performed. Miettinen and Lasota risk classification for the tumours were moderate risk group.

Conclusions

Diagnosis of jejunal GIST is often delayed due to difficulty in accessing the tumour on routine endoscopy. CECT is simple and extremely useful in diagnosis of jejunal GIST.
Introduction

Klebsiella pneumoniae may cause infection at multiple organs, with the risk being increased in patients with diabetes and other immunocompromised conditions. Klebsiella pneumoniae is also associated with a community-acquired primary invasive liver abscess syndrome. In addition to liver abscess, some patients may develop metastatic infection at other sites (endophthalmitis, meningitis, brain abscess, and lung abscess). Klebsiella pneumoniae primary liver abscess is defined as liver abscess that occurs in the absence of hepatobiliary disease, with a monomicrobial K. pneumoniae isolated.

Case report

A 59 years old gentleman with no known medical illness presented with fever and breathlessness for 3 days. Physical examination noted coarse crackle over right basal zone. Laboratory tests showed hyperglycemia, leucocytosis, acute renal failure and elevated hepatic aminotransferase. Blood culture showed monomicrobial Klebsiella pneumoniae and abdominal radiography revealed features of liver abscess with air pocket. Computed tomography also revealed features of liver abscess with presence of air pocket within the largest liver lesion, associated with bilateral extensive cavitating pneumonia. This gentleman required parenteral antibiotic for 5 weeks. Percutaneous drainage was also performed and aspirate culture yielded monomicrobial Klebsiella pneumonia. He recovered and discharged well.

Conclusion

Most of the treatment of Klebsiella pneumoniae liver abscess requires parenteral antibiotic therapy together with drainage. Community-acquired Klebsiella pneumoniae liver abscess rarely produce extended-spectrum beta-lactamases (ESBL). Antibiotic should be administered for four to six weeks. Longer courses of treatment may be needed for patients with persistent radiographic evidence of abscess or requiring subsequent drainage procedures. Treatment should be continued until imaging demonstrates complete or near complete resolution of the abscess.
LONG TERM OUTCOME OF CHRONIC HEPATITIS C PATIENTS ON HEMODIALYSIS WITH SUSTAINED ViroLOGICAL RESPONSE

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Introduction
Hepatitis C virus (HCV) infection remains common among the hemodialysis patient. Conventional or pegylated interferon monotherapy has been used to treat chronic hepatitis C (CHC) on hemodialysis with sustained virological response (SVR) rates ranging from 30-45%. The durability of SVR in hemodialysis patient is unknown.

Very few studies reported long term outcome of CHC patients on hemodialysis with SVR.

Objectives
To assess the clinical and virological outcome during long term follow up of CHC patients on hemodialysis with SVR following effective antiviral therapy.

Methodology
This study was a retrospective cohort study including 10 hemodialysis patients with SVR defined as HCV RNA PCR negative at 6 months after the effective antiviral therapy. Clinical outcome, biochemical hepatic parameter and HCV RNA PCR were followed.

Results
Mean follow up period of the 10 patients was 57.2 months after the end of treatment (range 28-90 months). 3 (30%), 4 (40%) and 3 (30%) patients were genotype 1a, 1b and 3 respectively. There were no biochemical relapses during the follow up. All the 10 patients had persistent HCV RNA not detected throughout the follow up period. 6 of the patients were well with no evidence of liver decompensation and still on regular hemodialysis. 1 patient had kidney transplant and HCV RNA remained undetectable 52 months after transplant. 2 patients died due to cardiac event and one patient died due to post renal transplant infection.

Conclusion
In hemodialysis patient with CHC, the SVR was durable during extended follow up, including post renal transplant. The long term outcome was good for this group of patients.
Introduction
Recent studies have shown an association between long term proton-pump inhibitor (PPI) therapies with increased risk of hip fracture. The mechanism for this association is still not fully understood and most of these studies were done in the Caucasian population. There is little data on this relationship in Asians. This study aimed to determine the association of long term PPI therapy with osteoporosis and osteopenia in our population.

Methods
A retrospective nested case-control study was conducted within the DXA scan database which retained all BMD measurements performed in UKMMC from 2003 onwards. The study cohort consisted of patients with PPI therapy of more than two years prior to date of DXA scan. Cases included all patients with low BMD whereas controls were those with normal BMD.

Results
A hundred and fourteen patients were selected as cases and 104 patients for controls. PPI use of more than four years was associated with low BMD at either hip or spine (AOR, 3.162; 95% CI, 1.45 – 6.72; p = 0.003). When patients with osteopenia were excluded from the analysis, an even greater association was found between PPI use of more than 4 years and osteoporosis (AOR 4.53; 95%CI, 1.39 – 14.77; p = 0.012). There was a significant difference in the age and BMI between cases and controls (63.8 versus 56.2 years old and 24.26 versus 26.69 kg/m2 respectively).

Conclusion
In our study population, patients on PPI therapy for more than four years were more likely to develop osteopenia and osteoporosis. However, these patients were also older and had a lower BMI. This finding highlights the importance in reviewing the prescription indication in patients with prolonged PPI use, especially in the elderly population.

Keywords
Proton pump inhibitor; Osteopenia; Osteoporosis; Bone mineral density.
Helicobacter pylori is unevenly distributed in various parts of the world (1). Its prevalence has much ethnical variation and has been shown to be low in the Malay race as compared to the other ethnic groups in our country. There had also been reports of its low prevalence rates in the state of Kelantan (4). This 5 year audit identifies low rates of infectivity within the Kelantanese population which corresponds with the earlier published reports.

**Objective**

1) To obtain the number of cases of confirmed H. pylori infection in patients who underwent upper gastrointestinal endoscopy in our hospital the past 5 years.

2) To establish the distribution of H. pylori based on ethnicity.

**Method**

By reviewing case notes of patients who underwent H. pylori testing by Urease method during an upper GI endoscopy. The Urease tests were performed based on endoscopy findings.

**Results**

Number of cases tested for H. pylori were 1354 (n). Out of this 54 patients were positive while the remaining 1300 patients were negative. Out of the positive cases 50 were of Malay origin (92.6%), 2 were Chinese (3.73%) and the remaining 2 were other races (3.73%). Using SPSS Software Version 18 the proportion of cases tested positive was 4% with 95% Confidence interval (C.I) of 2.9% to 5%.

**Discussion**

The distribution of H. pylori across the globe is not uniform (2). The first reported case in our country was made in 1986 (2) and the first publication by Goh et al in the Journal of Gastroenterology and Hepatology in 1990 (3). The ethnic difference in H. pylori prevalence in this country has been reported and have consistently found low rates amongst the Malay race (10 – 25%) as compared to Chinese (35 – 55%) and Indians (50 – 60%) (3). Uyub et al emphasised the low prevalence amongst the Kelantanese Malays (4). Our study was consistent with this observation as it demonstrated lower rates in comparison.

**Conclusion**

This review has shown the low prevalence rates of H. pylori among patients in the state of Kelantan the cause of which has yet to be established. The limitations if this audit can be minimised by conducting prospective trials using standardised H. pylori tests and further confirmation on histopathology.
MALIGNANT PERITONEAL MESOTHELIOMA PRESENTING AS ASCITES OF UNKNOWN ORIGIN: A DIAGNOSTIC CHALLENGE
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Malignant peritoneal mesothelioma is a rare neoplasm of the peritoneal cavity, with an estimated incidence of 250 new cases per year in the United States. We describe a case of diffuse malignant peritoneal mesothelioma arising in a 48-year-old man who presented with ascites of unknown origin. We emphasize the importance of diagnostic laparoscopy and subsequent histology of biopsy specimens in the diagnosis of this disease. A literature review was made focusing on treatment modalities.

MANAGING THE CHALLENGES OF CROHN’S DISEASE WITH A COMPLEX ENTEROCUTANEOUS FISTULA: AN APPROACH TO RECONSTRUCTIVE SURGERY
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Crohn’s disease (CD) is a chronic inflammatory bowel disease of unknown aetiology which predisposes patients to the formation of fistulae. Up to 50% of patients with Crohn’s disease are affected by fistulae, which is a major problem given the considerable morbidity associated with this complication. Appropriate treatment of fistulae requires knowledge of specific pharmacological and surgical therapies. Surgical repair of enterocutaneous fistulae (ECF) in Crohn’s disease may result in large skin defects of the anterior abdominal wall. We report the successful closure of a complex enterocutaneous fistula in a patient with ileocaecal Crohn’s disease, in which a large anterior abdominal wall defect was managed with reconstruction using a mesh and pedicled tensor fascia lata (TFL) myocutaneous flap. The case was technically very challenging, highlighting the value of a joint surgical and medical approach and a multidisciplinary team comprising general surgeons, plastic surgeons and gastroenterologists.

Keywords
Crohn’s disease; enterocutaneous fistula; abdominal wall reconstruction; tensor fascia lata flap
Massive gastrointestinal bleeding from left sided typhoid colitis is uncommon. Most of the typhoid colitis bleeding involves the right sided colon as it follows the distribution of colonic typhoid ulcers which typically involve terminal ileum, caecum and ascending colon. We report a rare case of bleeding from left sided typhoid colitis in a 34-year-old man who has concomitant bowel obstruction due to sigmoid colon carcinoma. The presentation, diagnosis, management as well as literature review was described.

In this report, we discuss a case of obscure gastrointestinal bleeding (OGBT) in a 16 year old morbidly obese teenager, presented with 1 week history of bloody diarrhea, low grade fever, 1 episode of vomiting but no haematemesis. No history of allergy or NSAIDs abuser. Clinical findings showed conjunctival pallor with episodes of hypotensive. Perectal and proctoscopy revealed blood clots. He was treated conservatively with fluids and blood products, however perectal bleeding persists and his Haemoglobin level unchanged despite transfusions. An urgent esophagogastrroduodenoscopy (OGDS) and colonoscopy performed proved inconclusive in determining a source of bleeding. On day 5 of admission, we performed a diagnostic laparoscopy and found a Meckel’s diverticulum and laparoscopic stapled resection done. Symptoms resolved post operatively and he progressed well in the ward and was discharged home.

Small number of diagnosis could be ruled out when a young teenager presented with OGBT. Modalities of investigations may vary depending on various centers and determination on diagnosing the patient has become a valuable knowledge and experience among young generations of surgeons.
Objective/Introduction

Acute pancreatitis can result in a number of complications, some potentially fatal. This includes systemic complications affecting other organs in the body. Occlusive and non-occlusive vascular complications are occasionally seen in patients initially presenting with acute pancreatitis. Here we present a case series of five patients who presented to Hospital Tuanku Ja’afar Seremban with such complications and their subsequent management.

Results

All five patients in the case series developed occlusive and non-occlusive vascular complications following an episode of acute pancreatitis. The presentation is variable among all five patients. Among the complications seen are splenic vein thrombosis, ischaemic bowel and portal vein thrombosis. The diagnosis and management of all five patients differed due to the variability in presentation and posed as a great challenge in managing the patients; resulting in various outcomes, from full recovery to death.

Discussion and Conclusion

Patients with acute pancreatitis can present with a multitude of complications; among which are occlusive and non-occlusive vascular complications which are rare in the general population. As the presentation is variable and can be potentially severe, the treatment plan should be individualized on a case-to-case basis, diagnosed early and treated promptly to prevent further complications.
Introduction
Osteoporosis and osteopenia collectively is a well-recognized complication of inflammatory bowel disease (IBD) and patients with IBD have been shown to be at increased risk of developing fractures. The potential role of Vitamin D in Malaysia which has a very different climate to Western countries with three large ethnic groups have not been studied.

Aims
To determine the prevalence low bone mineral density (BMD) in Malaysian patients with IBD
To examine the relationship between Vitamin D and fracture incidence with low BMD.

Methodology
IBD patients seen in the gastroenterology clinic were recruited. Baseline demography was recorded. 25-hydroxy-cholecalciferol (Vitamin D) levels from patients and controls were obtained. Normal, inadequate and low Vitamin D levels were defined as 60-160 nmol/L, 30-60 nmol/L and <30nmol/L respectively. Bone mineral density (BMD) was carried out in all IBD patients. Osteopenia and osteoporosis were defined as per WHO criteria.

Results
Seventy two patients were recruited. The prevalence of osteopenia and osteoporosis respectively were 58% and 12% in the spine and 51% and 14% in the hip. Mean Vitamin D levels in the IBD group was low at 45.1±17.40 nmol/l but this was not significant when compared to the control group, 44.15±12.53 nmol/l (p=0.865). Among the IBD group, 8(16.7%), 31(64.6%) and 9(18.8%) had normal, inadequate and low levels of Vitamin D respectively. There was no significant correlation between Vitamin D levels and BMD of spine or hip.

12(16.7%) of patients had a documented fragility fracture following the diagnosis of IBD. There was a statistically significant positive correlation between osteoporosis of hip and a history of fracture (OR 5.889 CI:1.41-24.53 p=0.009)

Conclusion
Osteoporosis is prevalent among Malaysian patients with IBD and is associated with a six fold increased risk of fracture. Most IBD patients had inadequate Vitamin D levels but this was not associated with low BMD.
PILOT PROJECT TO DETERMINE THE PRESENCE OF CELIAC DISEASE IN HIGH RISK PATIENTS

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Objective
To determine presence of celiac disease (CD) among high risk patients in Kuala Lumpur General Hospital from December 2011 to March 2012 since CD is thought to be rare in Malaysia with a predicted prevalence of 0.16-0.66% and no population survey.

Method
Patients from 12-70 years of age, presenting with unexplained iron deficiency anemia (IDA), chronic diarrhea or weight loss were recruited from December 2011-March 2012. Gastroscopy with total of 6 biopsies from 2nd part of duodenum was performed. Patients with other causes for IDA, chronic diarrhea and weight loss were excluded. Immunoblot test was performed for anti-transglutaminase antibody (ATA) and anti-gliadin antibody (AGA). Patients with positive ATA, with or without duodenal histopathological changes were diagnosed as classical or atypical CD respectively.

Results
Total of 29 patients were recruited for this study, of these 13 were excluded while 16 patients were analyzed. 11 had IDA and 5 had unexplained chronic diarrhea with weight loss. The mean (SD) hemoglobin was 8.4 (1.5) g/dl among the IDA patients. Indians were the largest group (n=7). 2 (12.5%) patients had positive ATA; 1 Malay and 1 Indian. Duodenal histology showed chronic duodenitis and the other was normal; sufficient to be diagnosed as atypical CD. Total of 5 patients had positive AGA antibody. Neither transferrin saturation (P value=0.122) nor race (P value=0.95) showed statistical difference.

Conclusion
Celiac disease is not uncommon among high risk population in Malaysia. Larger scale studies are required to determine the prevalence of CD among high risk population.
PP 44

PRESCRIBING PATTERN OF PROTON PUMP INHIBITOR BY NON GASTROENTEROLOGIST IN A TERTIARY PUBLIC HOSPITAL IN MALAYSIA

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Aim
To audit of the prescribing pattern of intravenous (IV) proton pump inhibitor (PPI) by non gastroenterologist in the medical department, Kuala Lumpur Hospital.

Method
A pilot study looked prospectively on usage of IV PPI over period of 7 days in the medical wards. The data collected included patient demography, indication for PPI use and final diagnosis.

Results
24 patient were started on IV PPI for various indication. Only 8 (33.3%) patient had gastrointestinal (GI) bleeding. Out of these 8 patients only 5 patients had clinical evidence of GI bleeding requiring therapeutic endoscopy. The other indications were dyspepsia in 12 (50%), anemia in 2 (8.3%), intestinal obstruction in 1 (4.2%) and severe sepsis in 1 (4.2%) patient.

Conclusion
In this pilot study, IV PPI was prescribed correctly only in every fifth patient by non gastroenterologist. Uncontrolled usage of IV PPI by medical professionals may further compromise limited medical resources in the public health sector.
Background
Several large clinical trials and meta-analyses have shown that the most commonly used first-line therapies for Helicobacter pylori (H. pylori) – including proton-pump inhibitors (PPIs) plus two antibiotics – may fail in up to 20% of patients. During the last few years, the efficacy of PPI-based regimens seems to be decreasing, and several studies have reported intention-to-treat eradication rates lower than 75%.

Aim
To evaluate success rate of eradication therapy and determine demographic factors that may influence the outcomes of treatment.

Materials and Methods
A retrospective observational study of all patients who have UBT and OGDS done in the endoscopy unit, HKL from October 2008 to November 2011. Demographic data, urease test results done during OGDS, choice of primary and secondary eradication therapies, outcome of UBT and repeat UBT were extracted from patients medical records.

Results
Success rate for first line therapy is 137/172 = 79.7% (95% confidence interval [CI] 73.3% - 86.0%).
Success rate for second line therapy is 10/31 = 32.3% (95% CI 16.1% - 48.4%).

Indian subjects responded more poorly to standard eradication regime compared with other ethnicities (71.6% vs 84.8% P=0.037). However, other demographic factors such as age and gender fail to affect eradication rate. Replacing clarithromycin, which was used in our standard first line eradication regime, ie. PPI, amoxicillin and clarithromycin, with metronidazole improved secondary eradication rate (87.5% vs 23.1%.P=0.097).

Conclusion
Primary eradication rate was comparable to most large clinical studies. However, secondary eradication rate was much lower than expected. Indian patients tend to respond more poorly to standard H. pylori eradication therapy.
Background
Klebsiella Pneumoniae pyogenic liver abscess is generally cited as the most common organism in Asian population. The trends of pyogenic liver abscess and its response to treatment were analysed.

Methods
Retrospective study of records of patients admitted for intrahepatic liver abscess over 2 year period were reviewed. Demographic, clinical, microbiological, radiological and surgical intervention and outcome, including morbidity and mortality were recorded.

Results
A total of 8 patients with intrahepatic liver abscess were encountered. Six of the patients were male. One patient was treated conservatively with antibiotics alone and remainder underwent percutaneous drainage as initial treatment. Two patients with septicemic shock however were rendered to surgical drainage after failing percutaneous drainage with non resolving liver abscess. One resulted in mortality whilst the other survived. Causative organism of Klebsiella Pneumoniae was positively cultured from 6 patients. All 8 patients have concomitant Diabetes Mellitus. Two patients had complete resolution of the liver abscess. Reduction in size of liver abscess was seen in another 4 patients. One patient was lost to follow up and another resulted in mortality due to severe sepsis with multi organ failure.

Conclusion
Timely treatment with both antibiotics and drainage is necessary for success of therapy. Surgical treatment may be needed when percutaneous drainage fails. No source for liver abscess was found however underlying condition of Diabetes Mellitus may predispose them to it.
Anatomical variations of the extrahepatic bile ducts are important in the case of laparoscopic cholecystectomy, liver resection and living donor transplantation. The frequency of bile duct injuries occurring during laparoscopic cholecystectomies, is twice as high as injuries occurring during open cholecystectomies. While the frequency and complexity of surgical procedures, like liver resections and living donor transplantations, is increasing, there is a renewed interest in detecting anatomic variants of the extrahepatic bile ducts that might increase the risk of bile duct injuries during cholecystectomy. We present 2 case series of anatomical variation of the extrahepatic bifurcation of common hepatic ducts found at endoscopic retrograde cholangiopancreatography (ERCP): a low bile duct bifurcation with ecstatic fusiform dilatation of extrahepatic duct causing bile stasis that prone for primary common bile duct calculi formation. One should make efforts to obtain adequate opacification of these ducts, otherwise anatomic variations can be overlooked and complication may occur. Surgical technique may also differ and challenging in the management of such cases (eg: cholangiojejunostomy).
INTRODUCTION AND OBJECTIVE
Reflux Esophagitis (RE) is a common disease that affects many in multi-racial population in Malaysia. The clinical manifestation varies among patients and the spectrum of presentation is wide. Prevalence rates of RE of up to 16% have been reported in the Asian population. Compare to western countries, RE often exhibit milder disease in Malaysia. Recent data, however, indicate that it is an emerging disease in Asia and its increase in prevalence seem to be a time lag phenomenon. The aim of this study was to evaluate the demography data of RE and the spectrum of clinical manifestation, both esophageal and extra-esophageal for patients in Hospital Ampang, a government tertiary hospital in the state of Selangor.

METHODOLOGY
Analysis is performed on both inpatient admitted to medical ward and outpatient attending gastroenterology clinic with a symptoms of RE from February 2012 to June 2012. A comprehensive data collection questionnaires form and database with details of patients’ demography and clinical manifestation was used in this study.

RESULTS
A total of 56 patients were recruited during this period, including 26 (46.4%) males and 30 (53.6%) females with the mean age of 52 years old. 62.5% were Malays, followed by 30.3% Chinese, 3.6% were Indians and 3.6% others. 19.6% have first degree family member with history of RE. Clinical manifestation of RE varies among patients, with majority of the patients have esophageal symptoms (71.4%), whereas 30.4% of patients have non-esophageal symptoms. 40 patients (71.4%) presented with upper abdominal pain/discomfort, follow by bloatedness (60.7%), heart burn >2 times a week (53.6%), chronic nausea or vomiting (19.6%), dysphagia (8.9%), odynophagia (3.6%). However, extra-esophageal symptoms are not uncommon. 17 patients (30.4%) has extra-esophageal symptoms, namely non-cardiac chest pain (16.1%), chronic cough (10.7%), chronic sore-throat (3.6%), asthma (1.8%), chronic bronchitis (1.8%), sinusitis (1.8%), persistent hiccup (1.8%), gum bleeding (1.8%) and bad breath (1.8%).

DISCUSSION AND CONCLUSION
Reflux esophagitis is a chronic disease that affects health-related quality of life. Clinical manifestation varies among patients, with esophageal symptoms twice more common as compare to extra-esophageal symptoms. Upper abdominal pain, bloatedness and heart burn remain the main presentation among RE patients.
Introduction and Objective

Reflux Esophagitis (RE) is a common condition in Malaysia. Gastroesophageal Reflux Disease (GERD) is significantly more common among Indians compared to Chinese and Malays whereas Non-erosive Esophageal Reflux disease (NERD) is more frequently seen in the Indian and Malays compared to the Chinese. The reasons for these differences are not known but may contribute by both genetic and environmental factors. Among the environmental factors, lifestyle factors, in particular being overweight/obese, incorrect dietary habits, the lack of regular physical activity and smoking have frequently been suggested to be possible RE risk factors. However, the exact pathogenetic role of these factors is still under debate. The aim of this study was to evaluate the demography data of RE for patients in Hospital Ampang, looking into risk factors and the endoscopic findings.

Methodology

Analysis is performed on both inpatient admitted to medical ward and outpatient attending gastroenterology clinic with a symptoms of RE from February 2012 to June 2012. A comprehensive data collection questionnaires form and database with details of patients’ demography, social and drug history was used in this study. OGDS was performed in all patients as gold standard for diagnosis.

Results

A total of 56 patients were recruited during this period. There were 26 (46.4%) males and 30 (53.6%) females with the mean age of 52 years old. 62.5 were Malays, 30.3% Chinese, 3.6% Indians and 3.6% others. Most of the patients were found to have certain risk factors. Dietary risk factors being the commonest. 30 patients (53.6%) have symptom worsen after consume spicy food, 23 patients (41.1%) oily meal, 17 patients (30.4%) tea, 15 patients (26.8%) coffee. Study also revealed lifestyle risk factors, including heavy meal before sleep (10.7%), 10 patients (17.9%) is a smoker, 5 patients (8.9%) have high BMI (BMI>30) and 2 patient (3.6%) consume alcohol. 32.1% of patients consume medication known to cause acid reflux. NSAIDS (44.4%) and calcium channel blocker (44.4%) being the commonest, follow by bronchodilator (16.7%), steroid (5.6%) and nitrates (5.6%). OGDS were performed in all patients. 4 patients (7.1%) have antral biopsy positive to H.pylori. 3 out of 4 patients with H.pylori infection has endoscopic evidence of GERD. 33.9% has endoscopic confirmation of GERD and 12.5% has no abnormality, indicating NERD. Gastritis was found in 53.6% of patient, gastric erosion (17.9%) and gastric ulcer (7.1%).

Discussion and Conclusion

Despite articles in the literature emphasizing the insufficient evidence to support an association between dietary behaviors, lifestyle and RE, clinico-epidemiology data of this study has shown some co-relation between these risk factors. Medication known to cause reflux symptoms especially NSAIDS and CCB were shown to have cause symptoms of RE.
SINGLE VERSUS DOUBLE THERAPY DURING ENDOSCOPY. A LOOK AT HOSPITAL TUANKU JAAFAR’S TREATMENT: MONOTHERAPY VERSUS DUAL MODALITY FOR HEMOSTASIS OF UPPER GASTROINTESTINAL NON VARICEAL BLEED

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Background

Upper gastrointestinal bleed is a common (yet challenging in management) case seen in Tuanku Ja’afar Hospital Seremban. Therapeutics for this has evolved due to new methods and instruments.

Objective

To compare treatment modality – looking at single versus double therapy in hemostasis of non variceal bleeding.

Method

A cross sectional study of oesophagoduodenoscopy was done from year 2009 to 2011 and trends of upper gastrointestinal bleeding was reviewed, then single modality, double modality and surgical intervention patients were separated.

Results

899 cases of upper GI bleed (non variceal) underwent endoscopic procedure.

Mean age for Forrest 1 ulcer is 62.47, Forrest 2A 69.34, Forrest 2B 60.1 and Forrest 2C 66.36.

In 2009, 16 patients Forrest 1 bleeds were treated with monotherapy with 3 (18.75%) rebleeds, 3 of 5 patients with Forrest 2A were treated with monotherapy with 0 rebleeds.

In 2010, 39 of 55 Forrest 1 bleeds were treated with monotherapy, and had 4 rebleeds (10.26%), 16 were given dual therapy with 0 rebleeds.

5 of 9 Forrest 2A were given monotherapy, with 1 rebleed (20%) and 4 dual therapy with 0 rebleed.

In 2011 18 of 37 Forrest 1 were treated with monotherapy resulting in 3 rebleeds (16.67%) and 19 were given dual therapy, with 1 rebleed (5.26%).

7 of 19 Forrest 2A were given monotherapy, and had 2 rebleeds (28.57%), and 10 given dual therapy with no rebleed.

In total, 6 (0.67%) required surgical intervention.

Conclusion

As latest guidelines suggest, dual therapy is superior to monotherapy in hemostasis. Surgical unit in Hospital Tuanku Jaafar is moving towards this trend in treatment of upper gastrointestinal bleed.
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SUSTAINED VIRAL RESPONSE (SVR) AMONG CHRONIC HEPATITIS C PATIENT POPULATION IN THE STATE OF PAHANG

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Objective

This is a retrospective study to investigate the sustained viral response (SVR) rate for Chronic Hepatitis C patients treated in the state of Pahang from 2004 to 2012. This study was carried out to determine the factors influencing SVR with regards to host and viral parameters in a ‘real-life’ clinical setting.

Methodology

Case notes of Chronic Hepatitis C patients attending the Gastro/Hepatology clinics in Hospital Tengku Ampuan Afzan (HTAA), Kuantan and Hospital Sultan Hj Ahmad Shah (HOSHAS), Temerloh were extracted and reviewed. Patient demographic data, host and viral factors and SVR were described. Factors affecting SVR were analysed by Chi-Square or independent t-test. Statistical analysis was performed using SPSS version 17.

Results

The total number of patients under follow-up in these 2 hospitals is 116. The mean age for all patients are 43.53 ± 11.56 years old (Range = 16-75). Majority of them are Malay (74.1%), male (70.7%), with single infection (98.3%) and having high viral load of >800,000 IU/ml (62.1%). Out of these 116 patients, 72 were given treatment. From 36 patients with results of HCV RNA 6 months post-treatment, SVR was achieved in 26 (72.2%). [Genotype 1: 55.6% and genotype 3: 71.4%]. SVR was not found to be significantly associated with any demographic parameters, host and viral factors.

Discussion

Pahang has a short history of 8 years in the treatment of Hepatitis C. We observed a higher overall SVR rate of 72.2%. This could be due to the dominant IL28B CC genotype in this region as well as strict supervised injections by trained nurses in our clinics. There were no variables found significantly associated with SVR due to the small number of SVR patients in Pahang. A nationwide cross-sectional study on the same issue is being planned now.

Conclusion

A SVR of 72.2% was achieved. No parameter was found significantly associated with SVR in this small cohort of patients.
THE FREQUENCY OF BOWEL OPENING CAN BE ONE OF THE PREDICTOR FOR QUALITY OF BOWEL PREPARATION

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Background/Aim

Inadequate bowel preparation (BP) leads to incomplete examination, cancellation, missed lesion and increased complication. Objective: of the study to assess the relationship between frequency of bowel opening (BO) and quality of bowel preparation.

Methods

Single center prospective observational study. All patients were given 3-liter PEG bowel preparation. The frequency of the BO after completing BR regime till patient report to endoscopy unit for colonoscopy recorded. The quality of BR is assessed using the Boston Bowel Preparation Scale (BBPS). The BR assessed base on scoring, BBPS 9(excellent), BBPS 8-7(good), BBPS 6-4(fair) and BBPS 0-3(poor).

Results

Total of 442 patients were recruited for this study. However, only 424 patients were included for the study because 20 patients did not complete the BR solution. There were 303 (71.5%) male and 121 (28.5%) female patients. The mean age of the study population is 45.9+14.9. Based of BBPS scoring the, 223 (52.6%) patients had excellent BP, 132 (31.1%) patients had good BP, 25 (5.9%) patients had BP and 44 (10.5%) had poor BR. Following this the quality of BR further grouped into satisfactory group 380 (89.6%) (which included excellent, good and fair BP) and unsatisfactory group (10.4%) (poor BP). Those patient that had BO < 8 times had unsatisfactory BP (p-value 0.29 (95%CI 0.175-0.934)).

Discussion

The possible quality of BP can be predicted by assessing the frequency of BO prior to colonoscopy to prevent rescheduling or cancellations. Frequency of BO could be a surrogate maker for non-compliant to BP regimes that leads to unsatisfactory BP. Waiting for patient to BO >8 times before colonoscopy might improve the quality of BP.

Conclusion

The frequency of BO < 8 times can be taken as one of the predictors of quality of BP. This helps the endoscopist to predict the possibility of unsatisfactory BP before colonoscopy.

Conclusion

The diagnosis of HH was confirmed with Gadolinium enhanced MRI combine with dynamic CT as this increases the diagnostic sensitivity to 100%. USG (sensitivity 46%), good tool for screening and follow-up study.
Pancreatic gastrointestinal stromal tumours are uncommonly reported worldwide. Due to its rarity, the treatment options are unclear especially when presented in an emergency setting. We present a case of haemorrhaging pancreatic GIST and the experience of different treatment modalities.

Case Report
A 74-year-old man presented with symptomatic anaemia and a painful left hypochondrium mass. Ultrasound and computed tomography of the abdomen showed a large solid-cystic septated mass arising from the pancreas. The patient underwent open surgery, endoscopy and angioembolization with partial success. Histological and immunohistochemical staining of positive CK-117, the mass was identified as a gastrointestinal tumour and treated with Imatinib after resolution of the emergent period. He died 3 months later of nosocomial fungaemia.

Conclusion
Extragastrointestinal stromal tumour of the pancreas should be considered in the differential diagnosis of the more common cystic lesions at this site. Optimal treatment modalities are still undefined pertaining to management of complicated tumours.
Early endoscopy is the standard of care in upper gastrointestinal bleeding. However most patients with lower gastrointestinal bleeding (LGIB) have favourable outcomes and majority will stop bleeding spontaneously. Therefore the role of urgent colonoscopy in LGIB remains controversial.

OBJECTIVES
To study the completeness, diagnostic yield and clinical impact of urgent colonoscopy in patients with LGIB.

METHODOLOGY
Procedure reports for urgent colonoscopy performed from 1 May 2011 till 30 April 2012 for LGIB were retrieved from Malaysian GI Registry. The reports were reviewed and relevant information were obtained and analyzed.

RESULTS
146 urgent colonoscopies were performed for LGIB during study period. 78 (53.4%) were male. Mean age was 56.5 years and median age was 56.6 years (range 18.8 to 90.0 years).

Caecal intubation rate was 64.4% (n=94). 14.4% (n=21) of patients needed repeat colonoscopy due to inadequate visualization of bowel for definite clinical decisions; this included 7.4% (n=4) of colonoscopies with successful caecal intubation.

24.0% (n=35) had an endoscopic therapy done. 26.7% (n=39) of them altered the immediate clinical management.

Causes were found in 60.3% (n=88) of patients. However only 39.8% (n=35) of them had endoscopic therapy, and 55.7% (n=49) had no clinical impact on immediate management of patients though the cause was identified. The causes were colorectal ulcers (n=36, 40.9%), diverticular disease (n=16, 18.2%), haemorrhoid (n=16, 18.2%), colitis (n=9, 10.2%), carcinoma (n=5, 5.7%), polyp (n=5, 5.7%) and angiodysplasia (n=1, 1.1%).

CONCLUSION
Urgent colonoscopy for LGIB results in high rate of incomplete examinations. Even when causes were found, only half of them had an impact on the clinical management in terms of endoscopic intervention or change in immediate clinical decision. Therefore, decision to perform urgent colonoscopy for LGIB should be individualised, taking into consideration relative importance of timing of intervention versus colonic preparation and overall impact in clinical management of patients.
Use of Flexible Endoscope in Sharp Food Impaction in the Upper Esophagus: Noninvasive Method of Assessment & Treatment
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Background
Ingestion of sharp food is common. It increases risk of perforation of gastrointestinal tract. Radiolucent objects in particular food particles (or fine objects as fish bone) are difficult to diagnose on imaging thus necessitating the need for diagnostic procedure in suspected cases with persistent symptoms. Fortunately, 80% to 90% will pass spontaneously, only 10% to 20% will require non-operative intervention, and less than 1% will require surgery.

Aim
A review of possible sequelae of sharp food impaction in the upper esophagus and its management.

Method
We report five cases of sharp food impacted in the upper esophagus and its management strategy.

Result
These cases can be divided into early and late presentation after ingestion with or without local complications. Flexible endoscope was used as initial method of assessment. It does not require general anesthesia and was done under conscious sedation in the endoscopic suite. Later, a planned management, which can be divided into; trial of removal using flexible endoscope, rigid endoscope removal under general anesthesia, surgical removal and primary repair or combination of the above were performed, yielding various outcomes.

Conclusion
Flexible endoscopy is a useful tool for initial assessment of site and nature of impaction before planning for removal. The factors influencing the outcome of these patients were retention time, perforation, abscess formation and mediastinitis.
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ENDOLUMINAL CLIPPING VERSUS SURGERY IN THE MANAGEMENT OF IATROGENIC COLONIC PERFORATION: A DIRECT COST ANALYSIS

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Introduction

Endoluminal clipping may obviate the need for surgery in patients with iatrogenic colonic perforations. However, the cost effectiveness of this treatment modality has not been evaluated to date.

Method

A retrospective, single-centre, direct cost analysis was performed to evaluate the differences in costs between endoluminal clipping and surgery in consecutive cases of iatrogenic colonic perforations.

Result

7,136 colonoscopies performed over a 5-year period were complicated by twelve (0.17%) perforations. 7 cases were treated by endoscopic clipping (with a success rate of 71.4%) and 5 by immediate surgery. Both groups of patients had similar clinical and demographic characteristics. Patients who were treated with endoscopic clipping had a shorter period of hospitalisation (median 9 vs 13 days) compared to surgery, but this was not statistically significant. Compared to patients who had immediate surgery, direct healthcare median costs for total procedures (US$ 115.10 vs US$ 1479.50, p=0.012) and investigations (US$ 124.60 vs US$ 512.90, p=0.048) during in-patient stay were lower for the endoscopic clipping group. There was a trend towards a lower overall in-patient median cost for patients managed with endoscopic clipping compared to surgery (US$ 1481.70 vs US$ 3281.90, p=0.073).

Conclusion

Endoluminal clipping may be more cost effective than surgery in the management of iatrogenic colonic perforations.