

ANNUAL SCIENTIFIC MEETING OF THE
MALAYSIAN SOCIETY OF GASTROENTEROLOGY AND HEPATOLOGY

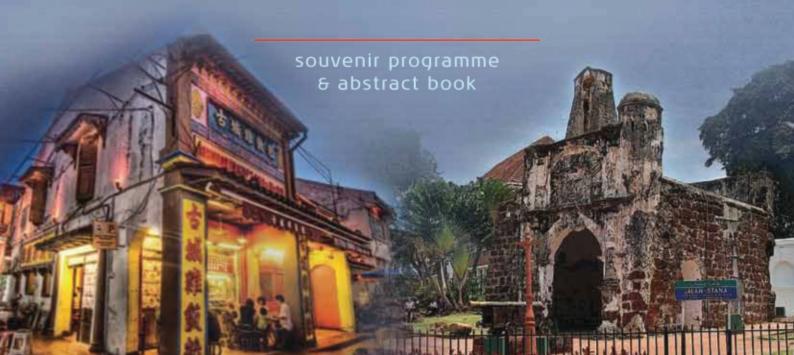
## GUT2012

DATE

29th June 2012 to 1st July 2012

VENUE

Holiday Inn Melaka Malaysia



### **Contents**

MSGH Committee 2011 - 2012 GUT 2012 - Organising Committee			2
Message from the President, MSGH & O	rganising Chairperson, G	UT 2012	3
12 <sup>th</sup> MSGH Distinguished Orator - Professor Richard Kozarek			4
9 <sup>th</sup> Panir Chelvam Memorial Lecturer - Professor Emad El-Omar			5
Programme At A Glance			6
Daily Programme			7-10
Moderators / Chairpersons			-11
Faculty Bio-Data			12-19
MSGH Annual Scientific Meetings and E	ndoscopy Workshops		20-26
Annual Therapeutic Endoscopy Work	shops - "Endoscopy"	(20-21)	
Distinguished Endoscopy Lecturers		(21)	
Annual Scientific Meetings - GUT (Ove	erseas Invited Faculty)	(22-25)	
MSGH Oration Lecturers / Panir Chelv	am Memorial Lecturers	(26)	
Conference Information			27-28
Function Rooms & Trade Exhibition			29
Acknowledgements			30
Abstracts			31-117
Lectures & Symposia	(31-50)		
Best Paper Award Presentations	(51-56)		
Poster Presentations	(57-117)		

### **MSGH Committee 2011 - 2012**

President Dr Ramesh Gurunathan

President Elect Prof Sanjiv Mahadeva

Immediate Past President Dr L Sanker V

Hon Secretary Dr Ong Tze-Zen

Hon Treasurer Dr Sheikh Anwar

Committee Members Dr Akhtar Qureshi

Dato' Dr Mazlam Zawawi

Dr Ooi Eng-Keat

Dr Soon Su-Yang

Dr Tan Huck-Joo

Prof Dato' Goh Khean-Lee Datuk Dr Jayaram Menon

Prof Dato' P Kandasami

### **GUT 2012 – Organising Committee**

Organising Chairman Dr Ramesh Gurunathan

Scientific Chairman Dr Tan Huck-Joo

Scientific Co-Chairman Prof Dato' Goh Khean-Lee

Committee Members Dr Akhtar Qureshi

Datuk Dr Jayaram Menon

Prof Dato' P Kandasami

Dato' Dr Mazlam Zawawi

Dr Ong Tze-Zen

Dr Ooi Eng-Keat

Dr L Sanker V

Prof Sanjiv Mahadeva

Dr Sheikh Anwar

Dr Soon Su-Yang

## Message from the President, MSGH & Organising Chairperson, GUT 2012



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 12<sup>th</sup> MSGH Oration, and Professor Emad El-Omar from the United Kingdom, will deliver the 9<sup>th</sup> Panir Chelvam Memorial lecture.

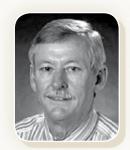
The past year has been an eventful year for the MSGH and I would like to thank the committee for an excellent job. We had a successful Asian Pacific *H. pylori* Monothematic Meeting early this year, followed by our popular Endoscopy Workshop at the University Malaya Medical Centre. Other various significant 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

### 12<sup>th</sup> MSGH Distinguished Orator – Professor Richard Kozarek

Citation by Professor Dato' Goh Khean-Lee



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.

### 9<sup>th</sup> Panir Chelvam Memorial Lecturer – Professor Emad El-Omar

Citation by Dr Ramesh Gurunathan



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, Bethseda, 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 9<sup>th</sup> Panir Chelvam Memorial Lecture for this year.

### Programme At A Glance

			<u> </u>	137
DATE TIME		29 <sup>TH</sup> JUNE 2012 FRIDAY	30 <sup>™</sup> JUNE 2012 SATURDAY	1 <sup>ST</sup> JULY 2012 SUNDAY
0730 - 0820			Meet-the-Expert Breakfast Sessions (1 - 3)	Meet-the-Expert Breakfast Sessions (4 - 6)
0830 - 0910		Li	S2	S <sub>5</sub>
0910 - 0950		L2	Gastrointestinal Bleed	Case Discussion
0950 - 1030		L3 12 <sup>th</sup> MSGH Oration	L5 9 <sup>th</sup> Panir Chelvam Memorial Lecture	L7
1030 - 1100	OU		Tea	
1100 - 1220	Registration	Best Paper Award Presentations	S3 Hepatocellular Carcinoma	S6 Morbid Obesity
1220 - 1300	Re	Lunch Satellite Symposium 1	Lunch Satellite Symposium 2	Lunch
1300 - 1430		Lunch Friday Prayers	Lunch	
1430 - 1510		S1 Case Discussion S4 Management of Severe Acute Pancreatitis	10	
1510 - 1550				
1550 - 1630		L4		
1630 - 1730	Tea	a Satellite Symposium	Tea Satellite Symposium	
1730 - 1800		Τε	28	
1800-1900	N	ISGH Annual General Meeting		
1930 - 2200		Faculty Dinner (By Invitation only)	MALAYSIA NIGHT	

## Daily Programme Day 1 • 29<sup>th</sup> June 2012, Friday

0730 - 1630	Registration	
0830 - 0910	L1 CHAIRPERSONS: ANDREW CHUA SENG-BOON / SANJIV MAHADEVA Is functional dyspepsia a psychosomatic disorder? [pg 31] JAN TACK	STRAITS BALLROOM EAST
0910 - 0950	L2 CHAIRPERSONS: SHASHI KUMAR MENON / S MAHENDRA RAJ HCC screening – Why this is important and what I recommend in clinical practice [pg 32] MORRIS SHERMAN	STRAITS BALLROOM EAST
0950 - 1030	L3: 12 <sup>th</sup> MSGH Oration  CHAIRPERSON: RAMESH GURUNATHAN  Minimally invasive/interventional gastroenterology: Where have we been? Where are we going? [pg 33]  RICHARD KOZAREK  CITATION: GOH KHEAN-LEE	STRAITS BALLROOM EAST
1030 - 1100	Tea	
1100 - 1220	Best Paper Award Presentations [pg 51-56] COORDINATORS: TAN HUCK-JOO / MAZLAM ZAWAWI	STRAITS BALLROOM EAST
1220 - 1300	Lunch Satellite Symposium 1 [Janssen] CHAIRPERSON: TAN HUCK-JOO Prucalopride - A new drug for the treatment of chronic con JAN TACK	STRAITS BALLROOM EAST
1300 - 1430	Lunch / Friday Prayers	ESSENSE KITCHEN
1430 - 1550	S1 : Case Discussion	STRAITS BALLROOM EAST
	HCC CHAIRPERSONS: SOON SU-YANG / JIN BONG RAVI MOHANKA, HAN KWANG-HYUB, JINSIL SEONG, MORRIS SHER JOSE DECENA SOLLANO, WONG KA-TAK, JIN BONG	MAN,
1550 - 1630	L4 CHAIRPERSONS: IDA HILMI / HAMIZAH RAZLAN The use of nutraceuticals in chronic liver disease: Myths, facts and dangers [pg 34] FRANCESCO MAROTTA	STRAITS BALLROOM EAST
1630 - 1730	Tea Satellite Symposium [TMA] Valuation of liver fibrosis: US elastography vs MR elastogra LEE JEONG-MIN	STRAITS BALLROOM EAST
1730 - 1800	Tea	
1800 - 1900	MSGH Annual General Meeting	STRAITS BALLROOM EAST
1930 - 2200	Faculty Dinner (By Invitation only)	

### **Daily Programme**

### Day 2 • 30<sup>th</sup> 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

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 MAHADEVA

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: 9<sup>th</sup> 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** 

MEETING ROOM 1

MEETING ROOM 3

MEETING ROOM 2

STRAITS BALLROOM EAST

STRAITS BALLROOM EAST

STRAITS BALLROOM EAST

## Daily Programme Day 2 • 30<sup>th</sup> June 2012, Saturday (cont'd)

1220 - 1400 Lunch Satellite Symposium 2 [Eisai]

STRAITS BALLROOM EAST

CHAIRPERSON: GOH KHEAN-LEE

Refractory GERD: Diagnosis and treatment in 2012

**JOSE DECENA SOLLANO** 

Lunch ESSENSE KITCHEN

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** 

STRAITS BALLROOM EAST

STRAITS BALLROOM EAST

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]

STRAITS BALLROOM EAST

CHAIRPERSON: AKHTAR QURESHI

Baveno V International Consensus in the treatment of

portal hypertension

**Y HORSMANS** 

**1730 - 1800** Tea

1930 - 2200 MALAYSIA NIGHT STRAITS BALLROOM EAST

### **Daily Programme**

Day 3 • 1<sup>st</sup> July 2012, Sunday

0730 - 0820 Meet-the-Expert Breakfast Sessions

4. New agents for HCV - Is it ready for prime time? [pg 46] MEETING ROOM 1

**HENRY CHAN** 

MODERATORS: HAMIZAH RAZLAN / TEE HOI-POH

5. Fibroscan – An alternative for liver biopsy?

MEETING ROOM 2

**SANJIV MAHADEVA** 

MODERATORS: PANG CHOK-WANG / SHEIKH ANWAR

6. Neoadjuvant therapy for gastric cancer? When and why?

MEETING ROOM 3

**SHAW SOMERS** 

MODERATORS: NIK RITZA KOSAI / ONG TZE-ZEN

O830 - O950 S5: Case Discussion STRAITS BALLROOM EAST

CHAIRPERSONS: NIK RITZA KOSAI / P KANDASAMI

Complicated GERD

SHAW SOMERS, LAWRENCE HO, JOSE DECENA SOLLANO

O95O - 103O L7 STRAITS BALLROOM EAST

CHAIRPERSONS: SHEIKH ANWAR / AHMAD SHUKRI MD SALLEH

New endoscopy-based therapies for malignant

biliary stricture [pg 47]

D N REDDY

Tea

1030 - 1100

1100 - 1220 **S6: Morbid Obesity** STRAITS BALLROOM EAST

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

Damansara 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 Kuching Specialist Hospital, Kuching, Sarawak

#### Tan Huck-Joo

Sunway Medical Centre, Petaling Jaya, Selangor

#### Tee Hoi-Poh

Kuantan Hospital, Kuantan, Pahang

### Faculty Bio-Data (cont'd)



#### **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 Jan-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 hepato-biliary 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).

### Faculty Bio-Data (cont'd)



#### 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 Barett'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.

### Faculty Bio-Data (cont'd)



#### **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.

### Faculty Bio-Data (cont'd)



#### **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 tumuors.



#### **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 CriticallyIII 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 Pancreatio 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.

### Faculty Bio-Data (cont'd)



#### **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 Johannesurg, South Africa in 1972, and completed his initial training in Internal Medicine at Baragwanath 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.

### Faculty Bio-Data (cont'd)



#### **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.

### Faculty Bio-Data (cont'd)



#### **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



### Annual Therapeutic Endoscopy Workshops – "Endoscopy"

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

Event	Faculty	Date
Difficult ERCP- "The Master's Approach"	Kees Huibregtse (Amsterdam, The Netherlands)	19 <sup>th</sup> August 1993
Endoscopic Ultrasonography	TL Tio (Washington, USA)	26 <sup>th</sup> July 1994
ERCP-"Basic Skills, Finer Points and New Techniques"	Kees Huibregtse (Amsterdam, The Netherlands)	25 <sup>th</sup> August 1994
Practical Points in Therapeutic Endoscopy	Nib Soehendra (Hamburg, Germany)	6 <sup>th</sup> December 1994
Therapeutic Endoscopy Workshop (In conjunction with Island Hospital Penang, Malaysia)	Nib Soehendra (Hamburg, Germany) Kees Huibregtse (Amsterdam, Netherlands)	22 <sup>nd</sup> July 1997
Lasers in Gastroenterology	R Leicester (London, United Kingdom)	13 <sup>th</sup> August 1997
GI Endoscopy Nurses Workshop- "Setting the Standards for Practice"	Staff Members - Endoscopy Unit, University Hospital, Kuala Lumpur, Malaysia	30 <sup>th</sup> April - 2 <sup>nd</sup> May 1999
Endoscopy 2000	Sydney C S Chung (Hong Kong, China) Kenji Yasuda (Kyoto, Japan) Wang Yong-Guang (Beijing, China) Nageshwar Reddy (Hyderabad, India) GIA Faculty: Dorothy Wong (Hong Kong, China)	13 <sup>th</sup> - 15 <sup>th</sup> April 2000
Endoscopy 2001- "A Master Class in Therapeutic Endoscopy"	Nib Soehendra (Hamburg, Germany) <i>GIA Faculty:</i> Adriana Cargin (Melbourne, Australia)	14 <sup>th</sup> - 15 <sup>th</sup> April 2001
Endoscopy 2002 "Enhancing Basic Skills and Developing Expertise"	Christopher Williams (London, United Kingdom) Naotaka Fujita (Sendai, Japan) Joseph Leung (Sacramento, USA) Kees Huibregtse (Amsterdam, Netherlands) GIA Faculty: Diana Jones (Sydney, Australia)	5 <sup>th</sup> - 7 <sup>th</sup> April 2002
Endoscopy 2003 "The Cutting Edge of Gl Endoscopy"	Douglas Howell (Portland, USA) Haruhiro Inoue (Tokyo, Japan) Simon K Lo (Los Angeles, USA) Nageshwar Reddy (Hyderabad, India)	28 <sup>th</sup> February - 2 <sup>nd</sup> March 2003
Endoscopy 2004: "Appreciating the Art of GI Endoscopy"	Firas Al Kawas (Washington, USA) Yoshihiro Sakai (Tokyo, Japan) Stefan Seewald (Hamburg, Germany) Joseph Sung (Hong Kong, China)	5 <sup>th</sup> - 7 <sup>th</sup> March 2005
Endoscopy 2005- "Defining the Scope of Excellence"	Guido Costamagna (Rome, Italy) Shim Chan-Sup (Seoul, South Korea) K Yasuda (Kyoto, Japan) B Rembacken (Leeds, United Kingdom)	1 <sup>st</sup> - 3 <sup>rd</sup> April 2005
Endoscopy 2006- "Frontiers of Therapeutic Endoscopy"	ATR Axon (Leeds, United Kingdom), James Lau (Hong Kong, China), Seo Dong-Wan (Seoul, Korea), Irving Waxman (Chicago, USA), Naohisa Yahagi (Tokyo, Japan)	14 <sup>th</sup> - 16 <sup>th</sup> April 2006

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)	13 <sup>th</sup> - 15 <sup>th</sup> 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)	29 <sup>th</sup> February, 1 <sup>st</sup> - 2 <sup>nd</sup> March 2008
Endoscopy 2009- "Exploring the Limits of Endoscopy"	Jerome D Waye (New York, USA), Kulwinder Dua (Milwaukee, USA), Amit Maydeo (Mumbai, India), H Kawamoto (Okayama, Japan), I Yasuda (Gifu, Japan), Lee Yong-Chan (Seoul, Korea), Y Sano (Kobe, Japan)	20 <sup>th</sup> - 22 <sup>nd</sup> March 2009
Endoscopy 2010 (organised with the APDW 2010) (In conjunction with Selayang Hospital, Kuala Lumpur, Malaysia)	Michael Bourke (Sydney, Australia), David Carr-Locke (New York, USA), Mitsuhiro Fujishiro (Tokyo, Japan), Marc Giovannini (Marseilles-France), Takuji Gotoda (Tokyo, Japan), James Lau (Hong Kong, China), Amit Maydeo (Mumbai, India), Ibrahim Mostafa (Cairo, Egypt), Horst Neuhaus (Düsseldorf, Germany), Nageshwar Reddy (Hyderabad, India), Rungsun Reknimitr (Bangkok, Thailand), Seo Dong-Wan (Seoul, Korea), Naohisa Yahagi (Tokyo, Japan), Hironori Yamamoto (Tokyo, Japan), Kenjiro Yasuda (Kyoto, Japan)	20 <sup>th</sup> and 21 <sup>st</sup> September 2010
Endoscopy 2011 "What's New and What's Good for Our Patients"	Hisao Tajiri (Tokyo, Japan), Chiu Han-Mo (Taipei, Taiwan), Arthur Kaffes (Sydney, Australia), Ho Khek-Yu (Singapore), Hiroo Imazu (Tokyo, Japan), Takao Itoi (Tokyo, Japan), Lee Dong-Ki (Seoul, Korea), Takahisa Matsuda (Tokyo, Japan), Moon Jong-Ho (Seoul, Korea)	14 <sup>th</sup> - 17 <sup>th</sup> 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), Rajvinder Singh (Adelaide, Australia), Wang Hsiu-Po (Taipei, Taiwan), Kenshi Yao (Fukuoka, Japan)	30 <sup>th</sup> - 31 <sup>st</sup> March, 1 <sup>st</sup> April 2012

### **Distinguished Endoscopy Lecturers**

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

### Annual Scientific Meetings – GUT (Overseas Invited Faculty)

### **The Stomach '96** (Co-organised with the College of Surgeons)

### 3<sup>rd</sup> - 6<sup>th</sup> 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)

### 23<sup>rd</sup> - 26<sup>th</sup> July 1997, Penang

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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 Huibregtse	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**

### 25<sup>th</sup> – 27<sup>th</sup> 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

### 23<sup>rd</sup> - 25<sup>th</sup> 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	SΔΙΙΠΙ ΔΒΔΒΙΔ		

### **GUT 2000**

### 24<sup>th</sup> – 26<sup>th</sup> August 2000, Melaka

Anthony Axon	UNITED KINGDOM	David Mutimer	UNITED KINGDOM
Geoffrey C Farrell	AUSTRALIA	Ng Han-Seong	SINGAPORE
Vay Liang W Go	USA	Thierry Poynard	FRANCE
Humphrey J F Hodgson	UNITED KINGDOM	Francis Seow-Choen	SINGAPORE
Peter Katelaris	AUSTRALIA	Jose D Sollano	PHILIPPINES
Lim Seng-Gee	SINGAPORE	Guido N J Tytgat	NETHERLANDS
Anthony I Morris	UNITED KINGDOM	Michael Wolfe	USA

### Gastro 2001 (With the participation of the American Gastroenterological Association)

### 5<sup>th</sup> – 8<sup>th</sup> April 2001, Kota Kinabalu, Sabah

Aziz Rani	INDONESIA	Pinit Kullavanijaya	THAILAND
Chung Owyang	USA	Lam Shiu-Kum	HONG KONG, CHINA
Sydney S C Chung	HONG KONG, CHINA	Peter Malfertheiner	GERMANY
Andrew Clouston	AUSTRALIA	James M Scheiman	USA
John Dent	AUSTRALIA	Mahesh P Sharma	INDIA
Fock Kwong-Ming	SINGAPORE	Gurkirpal Singh	USA
Robert N Gibson	AUSTRALIA	Jose D Sollano	PHILIPPINES
Richard Hunt	CANADA	J L Sweeney	AUSTRALIA
Y K Joshi	INDIA	Rakesh Tandon	INDIA
Joseph Kolars	USA	Benjamin C Y Wong	HONG KONG, CHINA
Koo Wen-Hsin	SINGAPORE	Xiao Shu-Dong	PR CHINA
Edward Krawitt	USA		

### **GUT 2002**

### 27<sup>th</sup> - 30<sup>th</sup> June 2002, Penang

Chow Wan-Cheng	SINGAPORE	Tore Lind	SWEDEN
Anuchit Chutaputti	THAILAND	Barry James Marshall	AUSTRALIA
David Forman	UNITED KINGDOM	Ng Han-Seong	SINGAPORE
Lawrence Ho Khek-Yu	SINGAPORE	C S Pitchumoni	USA
Peter Katelaris	AUSTRALIA	Herbert J Tilg	AUSTRIA
James Y W Lau	HONG KONG, CHINA	John Wong	HONG KONG, CHINA

### **GUT 2003**

### 28<sup>th</sup> - 31<sup>st</sup> August 2003, Kuching, Sarawak

Francis K L Chan	HONG KONG, CHINA	Teerha Piratvisuth	THAILAND
Chang Mei-Hwei	TAIWAN	Roy Pounder	UNITED KINGDOM
W G E Cooksley	AUSTRALIA	Eamonn M M Quigley	IRELAND
Gwee Kok-Ann	SINGAPORE	Jose D Sollano Jr	PHILIPPINES
Humphrey J O'Connor	IRELAND	Joseph Sung	HONG KONG, CHINA
Colm O'Morain	IRELAND	Yeoh Khay-Guan	SINGAPORE

### **GUT 2004**

### 24<sup>th</sup> - 27<sup>th</sup> June 2004, Penang

Sydney C S Chung	HONG KONG, CHINA	Peter W R Lee	UNITED KINGDOM
Geoffrey C Farrell	AUSTRALIA	Masao Omata	JAPAN
Ronnie Fass	USA	Teerha Piratvisuth	THAILAND
David Fleischer	USA	Mario Rizzetto	ITALY
Fock Kwong-Ming	SINGAPORE	Russell W Strong	AUSTRALIA
Huang Jia-Qing	CHINA	Benjamin C Y Wong	HONG KONG, CHINA
Lam Shiu-Kum	HONG KONG, CHINA		

### **GUT 2005**

### 23<sup>rd</sup> - 25<sup>th</sup> June 2005, Pulau Langkawi, Kedah

Raymond Chan Tsz-Tong	HONG KONG, CHINA	Peter Malfertheiner	GERMANY
Meinhard Classen	GERMANY	Kenneth McColl	IRELAND
Anthony Goh	SINGAPORE	Graeme Young	AUSTRALIA
Gerald Johannes Holtmann	AUSTRALIA	Yuen Man-Fung	HONG KONG, CHINA

### **GUT 2006**

### 20<sup>th</sup> - 23<sup>rd</sup> June 2006, Kuala Lumpur

Peter Gibson	AUSTRALIA	Ng Han-Seong	SINGAPORE
Lawrence Ho Khek-Yu	SINGAPORE	Ooi Choon-Jin	SINGAPORE
Gerald Johannes Holtmann	GERMANY	Fred Poordad	USA
Lim Seng-Gee	SINGAPORE	Francis Seow-Choen	SINGAPORE
Irvin Modlin	USA	Nimish Vakil	USA
Anthony Morris	UNITED KINGDOM	John Wong	HONG KONG, CHINA
Nageshwar Reddy	INDIA		

#### **GUT 2007**

### 29<sup>th</sup> August – 1<sup>st</sup> September 2007, Kota Kinabalu, Sabah

•	•		
Ronnie Fass	USA	Charlie Millson	ENGLAND
Marc Giovannini	FRANCE	G V Rao	INDIA
Robert Hawes	USA	Marcelo Silva	ARGENTINA
Richard Hunt	CANADA	Nib Soehendra	GERMANY
Finlay Macrae	AUSTRALIA	Daniel Wong	SINGAPORE
Norman Marcon	USA	Hironori Yamamoto	JAPAN
Amit Maydeo	INDIA	Yeoh Khay-Guan	SINGAPORE

### **GUT 2008**

### 21<sup>st</sup> - 24<sup>th</sup> August 2008, Kuala Lumpur

Anuchit Chutaputti	THAILAND	Davide Lomanto	SINGAPORE
Peter Bytzer	SWEDEN	Lui Hock-Foong	SINGAPORE
Henry Chan Lik-Yuen	HONG KONG, CHINA	Govind K Makharia	INDIA
Sydney C S Chung	HONG KONG, CHINA	Prateek Sharma	USA
David Y Graham	USA	Rajvinder Singh	AUSTRALIA
Lawrence Ho Khek-Yu	SINGAPORE	Mitchell Shiffman	USA
Pali Hungin	UNITED KINGDOM	Sundeep Punamiya	SINGAPORE
Rupert Leong	AUSTRALIA		

### **GUT 2009**

### 14<sup>th</sup> to 16<sup>th</sup> August 2009, Pulau Langkawi, Kedah

Geoffrey Farrell	AUSTRALIA	Irvin Modlin	USA
Fock Kwong-Ming	SINGAPORE	Fabio Pace	ITALY
Peter R Galle	GERMANY	Rungsun Rerknimitr	THAILAND
Christopher Khor	SINGAPORE	Joseph Sung Jao-Yiu	HONG KONG, CHINA
George K K Lau	HONG KONG, CHINA	Daniel Wong Wai-Yan	UNITED KINGDOM
Lim Seng-Gee	SINGAPORE	Yeoh Khay-Guan	SINGAPORE
Lo Chung-Mau	HONG KONG, CHINA		

### APDW 2010 (Incorporating GUT 2010 & Endoscopy 2010)

### 19<sup>th</sup> to 22<sup>nd</sup> September 2010, Kuala Lumpur Convention Centre, Kuala Lumpur

		•			
Subrat Kumar Acharya	INDIA	Hiroyuki Isayama	JAPAN	Eamonn Quigley	IRELAND
Deepak Amarapurkar	INDIA	Takao Itoi	JAPAN	Shanmugarajah Rajendra	AUSTRALIA
Ang Tiing-Leong	SINGAPORE	Derek Jewell	UNITED KINGDOM	Gurudu Venkat Rao	INDIA
John Atherton	UNITED KINGDOM	Jia Ji-Dong	CHINA	Nageshwar Reddy	INDIA
Anthony Axon	UNITED KINGDOM	Utom Kachintorn	THAILAND	Rungsun Rerknimitr	THAILAND
Deepak Bhasin	INDIA	Hiroshi Kashida	JAPAN	Jean Francois Rey	FRANCE
Henry J Binder	USA	Peter Katelaris	AUSTRALIA	Shomei Ryozawa	JAPAN
Mary Bong	AUSTRALIA	Takashi Kawai	JAPAN	Yutaka Saito	JAPAN
Michael Bourke	AUSTRALIA	Christopher Khor Jer	1-Lock SINGAPORE	Shiv Sarin	INDIA
Marco Bruno	THE NETHERLANDS	Nayoung Kim	KOREA	Wolff Schmiegel	GERMANY
David Carr-Locke	USA	Seigo Kitano	JAPAN	Juergen Schoelmerich	GERMANY
Ashok Chacko	INDIA	Sriram Krishnan	USA		NITED KINGDOM
Henry Chan Lik-Yuen	HONG KONG, CHINA	Shin-ei Kudo	JAPAN	Seo Dong-Wan	KOREA
Francis Chan Ka-Leung		Ashish Kumar	INDIA	Francis Seow-Choen	SINGAPORE
Adarsh Chaudhary	INDIA	George Lau	HONG KONG, CHINA	Prateek Sharma	USA
Yogesh Chawla	INDIA		HONG KONG, CHINA	Shim Chan-Sup	KOREA
Yang Chen	USA	Rupert Leong	AUSTRALIA	•	JAPAN
Chen Min-Hu	CHINA	Leung Wai-Keung	HONG KONG, CHINA		PHILIPPINES
Philip Chiu	HONG KONG, CHINA	Lim Seng-Gee	SINGAPORE		GERMANY
Pierce Chow	SINGAPORE		TAIWAN	Russell W Strong	AUSTRALIA
Chow Wan-Cheng	SINGAPORE		TAIWAN	Kentaro Sugano	JAPAN
Sylvia Crutchet	CHILE		HONG KONG, CHINA	Kazuki Sumiyama	JAPAN
J Enrique Dominguez-M		Lo Gin-Ho	TAIWAN		G KONG, CHINA
Greg Dore	AUSTRALIA	Anna Lok Suk-Fong	USA	Hisao Tajiri	JAPAN
Christophe DuPont	FRANCE	_	INDIA	Nicholas Joseph Talley	AUSTRALIA
Anders Ekbom	SWEDEN	Varocha Mahachai	THAILAND	Narci Teoh	AUSTRALIA
Geoffrey Charles Farrell		Govind Makharia	INDIA	Judith Tighe-Foster	AUSTRALIA
Ronnie Fass	USA	Peter Malfertheiner	GERMANY		NETHERLANDS
Fock Kwong-Ming	SINGAPORE	Takahisa Matsuda	JAPAN	Noriya Úedo	JAPAN
Ruggiero Francavilla	ITALY		INDIA	James Versalovic	USA
Mitsuhiro Fujishiro	JAPAN	Kenneth E L McColl	UNITED KINGDOM	Wang Hsiu-Po	TAIWAN
Peter Galle	GERMANY	1	CANADA	William E Whitehead	USA
Edward Gane	NEW ZEALAND	Irvin Modlin	USA	Simon Wong Kin-Hung HO	NG KONG, CHINA
Uday Ghoshal	INDIA	Moon Jong-Ho	KOREA	Benjamin Wong Chun-Yu HO	
Peter Gibson	AUSTRALIA	Ibrahim Mostafa	EGYPT	Justin Wu HO	NG KONG, CHINA
Marc Giovannini	FRANCE	Horst Neuhaus	GERMANY	Naohisa Yahagi	JAPAN
Takuji Gotoda	JAPAN	Masao Omata	JAPAN	Hironori Yamamoto	JAPAN
Gwee Kok-Ann	SINGAPORE	Evan Ong	PHILIPPINES	Ichiro Yasuda	JAPAN
Robert Heading	UNITED KINGDOM	Ooi Choon-Jin	SINGAPORE		JAPAN
Janaki Hewavisenthi	SRI LANKA	Park Hyo-Jin	KOREA	,	AUSTRALIA
Lawrence Ho Khek-Yu	SINGAPORE	-	THAILAND	Graeme Young	AUSTRALIA
Bing Hu	CHINA		HONG KONG, CHINA		TAIWAN
Pali Hungin	UNITED KINGDOM	Sundeep Punnamiya			G KONG, CHINA
Richard Hunt		Qian Jia-Ming		Qi Zhu	CHINA
		3			

### **GUT 2011**

### $27^{\text{th}}$ to $29^{\text{th}}$ May 2011, Kuala Lumpur

Akhtar Qureshi	IRELAND	Ling Khoon-Lin	SINGAPORE
Luigi Bolondi	ITALY	Lui Hock-Foong	SINGAPORE
Hiroto Miwa	JAPAN	Sybille Mazurek	GERMANY
Chan See-Ching	HONG KONG, CHINA	Colm O'Morain	IRELAND
Philip Chiu Wai-Yan	HONG KONG, CHINA	Ooi Choon-Jin	SINGAPORE
Kang Jin-Yong	UNITED KINGDOM	See Teik-Choon	UNITED KINGDOM
Kao Jia-Horng	TAIWAN	Yeoh Khay-Guan	SINGAPORE
George K K Lau	HONG KONG, CHINA		



### **MSGH Oration Lecturers**

No	Year	Orator	Торіс
1 <sup>st</sup>	2001	P Kandasami Kuala Lumpur, Malaysia	Gastroenterology in Malaysia
2 <sup>nd</sup>	2002	Barry J Marshall Perth, Australia	Helicobacter pylori: How it all came about and where do we go from here?
3 <sup>rd</sup>	2003	Guido J Tytgat Amsterdam, The Netherlands	Future Developments in Gastroenterology
4 <sup>th</sup>	2004	Lam Shiu-Kum Hong Kong, China	Pathogenesis of Gastric Cancer – A Unifying Concept
5 <sup>th</sup>	2005	Meinhard Classen Munich, Germany	GI Cancer – The Global Burden in the New Millennium
6 <sup>th</sup>	2006	John Wong Hong Kong, China	Multi-Disciplinary Treatment in Esophageal Cancer: The Price of Failure
7 <sup>th</sup>	2007	Norman Marcon Toronto, Canada	New Optical Technologies for Early Detection of Dysplasia
8 <sup>th</sup>	2008	Sydney Chung Hong Kong, China	Ulcer Bleeding: What you really want to know
9 <sup>th</sup>	2009	Geoffrey Farrell Canberra, Australia	Battling the Bulge in Asia – Implications for Gastroenterologists
10 <sup>th</sup>	2010	Nicholas Joseph Talley Newcastle, Australia	New Insights into the Aetiopathogenesis of Functional Dyspepsia
11 <sup>th</sup>	2011	Colm O'Morain London, United Kingdom	CRC – The Emerging Cancer in the 21 <sup>st</sup> Century

### **Panir Chelvam Memorial Lecturers**

No	Year	Orator	Topic
1 <sup>st</sup>	2004	Mohd Ismail Merican Kuala Lumpur, Malaysia	Treatment of Chronic Viral Hepatitis in the Asia-Pacific Region: Realities and Practical Solutions
2 <sup>nd</sup>	2005	Peter Malfertheiner Magdeburg, Germany	Diagnosis and Management of Pancreatic Cancer
3 <sup>rd</sup>	2006	Nageshwar Reddy Hyderabad, India	Gl Endoscopy in India – Developement and Lessons for the Future
4 <sup>th</sup>	2007	Richard Hunt Hamilton, Canada	Evidence-based Medicine in the Real World
5 <sup>th</sup>	2008	Pali Hungin Durham, United Kingdom	Plausible Solutions for Impossible Problems
6 <sup>th</sup>	2009	Fock Kwong-Ming Singapore	Lower GI Bleeding — Epidemiology and Management
7 <sup>th</sup>	2010	Joseph Sung Hong Kong, China	The Future Role of the Gastroenterologist in Digestive Oncology
8 <sup>th</sup>	2011	Kang Jin-Yong London, United Kingdom	East-West Differences in Gastrointestinal Diseases

### **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**

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#### **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 @ 30<sup>TH</sup> 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:

29<sup>th</sup> June 2012 (Friday) 0730 to 1700 hrs 30<sup>th</sup> June 2012 (Saturday) 0730 to 1700 hrs 1<sup>st</sup> 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 29<sup>th</sup> June 2012 till 1200 hrs on 1<sup>st</sup> 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.

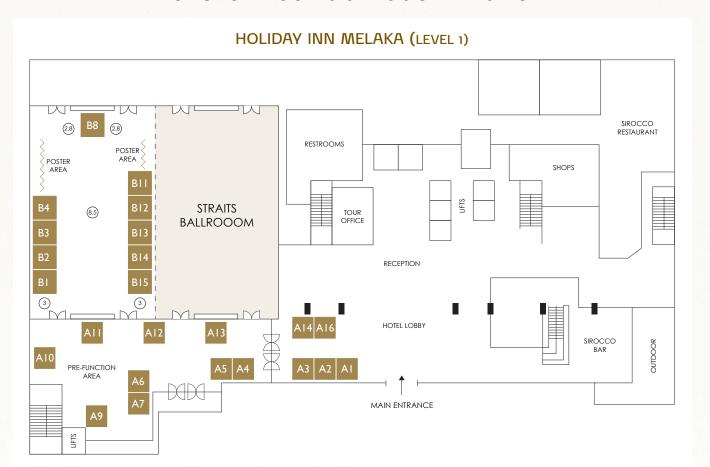
#### **LIABILITY**

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 arises.

### **Function Rooms & Trade Exhibition**



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### **Acknowledgements**

The Organising Committee of the GUT 2012 – Annual Scientific Meeting of the Malaysian Society of Gastroenterology & Hepatology expresses its deep appreciation to the following for their support and contribution to the success of the conference:

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### L1

#### 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 contr oversy, with some authors focussing on 'peripheral' mechanisms, i.e. underlying abnormalities in the gastrointestinal tract, and other focussing 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.

L2

### HCC SCREENING - WHY THIS IS IMPORTANT AND WHAT I RECOMMEND IN CLINICAL PRACTICE

Morrris Sherman University of Toronto, Canada

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.)I should be done. If the appearances are typical the diagnosis is made. If not, a biopsy is required.



### L3: 12th MSGH Oration

### 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 schismed into different disciplines. Optimization of patient care requires reintegration of those disciplines into common space, administrative structure, and/or philosophy.

#### L4

# THE USE OF NUTRACEUTICALS IN CHRONIC LIVER DISEASE: MYTHS, FACTS AND DANGERS

Francesco Marotta Milano, Italy

There are a number of unsolves 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 selfmedication 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, cathechins 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 unaffecting 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.

#### Meet-the-Expert Breakfast Session (1)

#### WHAT DO THE TOP GI JOURNALS LOOK FOR?

**Emad El-Omar** 

Chair of Gastroenterology, Aberdeen, United Kingdom

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.

**S2** 

# ASIA PACIFIC WORKING GROUP CONSENSUS ON NON-VARICEAL UPPER GASTROINTESTINAL BLEEDING

James Y W Lau Prince of Wales Hospital, Shatin, The Chinese University of Hong Kong Hong Kong SAR, China

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

Department of Imaging and Interventional Radiology, Prince of Wales Hospital 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.

### L5: 9th Panir Chelvam Memorial Lecture

#### **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 inflammationmediated 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.

**S3** 

#### 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.

**S3** 

#### TREATMENT HEPATOCELLULAR CARCINOMA WITH SORAFENIB

Morris Sherman University of Toronto, Canada

Until recently there was no treatment for advance 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 ahs 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 we 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.

**S3** 

# INNOVATIVE ROLE OF RADIOTHERAPY IN TREATMENT OF HEPATOCELLULAR CARCINOMA

Jinsil Seong

Department of Radiation Oncology, Yonsei Liver Cancer Center Special Clinic, Yonsei University Medical College, Seoul, Korea

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, locoregional 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.

**S3** 

#### LIVER TRANSPLANTATION FOR HCC

Ravi Mohanka

Medanta Institute of Liver Transplant and Regenerative Medicine, Medanta-The Medicity, Gurgaon, Haryana, India

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 extrahepatic 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.

**L6** 

# ASSESSMENT OF LIVER STEATOSIS AND FIBROSIS – WHY IS IT IMPORTANT IN THE TREATMENT OF CHRONIC LIVER DISEASE

Henry LY Chan

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

#### **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.

#### **S4**

#### RISK ASSESSMENT AND PROGNOSTICATION OF SEVERE ACUTE PANCREATITIS

D Nageshwar Reddy
Asian Institute of Gastroenterology, Hyderabad, India

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% Cl 2.5-8.3) and 4.3 (95% Cl 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.

#### **S4**

#### 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 fur 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.

#### **S4**

#### SURGERY IN ACUTE PANCREATITIS - WHEN DO YOU INTERVENE AND HOW?

Jin Bong

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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.

#### **S4**

#### **NUTRITIONAL TIMING AND OPTIMIZATION IN ACUTE PANCREATITIS**

Francesco Marotta Milano, Italy

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 LY 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.

L7

#### NEW ENDOSCOPY-BASED THERAPIES FOR MALIGNANT BILIARY STRICTURE

D Nageshwar Reddy Asian Institute of Gastroenterology, Hyderabad, India

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 cholangiocarinoma. 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 Zoepf 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.

56

#### **EPIDEMIOLOGY AND CONSEQUENCES OF MORBID OBESITY**

Lawrence Khek-Yu Ho

Chair, University Medicine Cluster, Head, Department of Medicine, Head, Department of Gastroenterology & Hepatology, National University Health System, Singapore

In 2010, the World Health Organization estimated there were a total of 1.93 billion overweight (Caucasians, BMI  $\geq$  25; Asians, BMI  $\geq$  23) or obese (Caucasians, BMI  $\geq$  30; Asians, BMI  $\geq$  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  $\geq$  40) remain limited, with bariatric surgery being the mainstay intervention.

56

#### **ENDOSCOPIC TREATMENT OF MORBID OBESITY**

D Nageshwar Reddy
Asian Institute of Gastroenterology, Hyderabad, India

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.

56

#### SURGERY FOR OBESITY

Shaw Somers United Kingdom

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 OI	ORAL ESOMEPRAZOLE IN PREVENTION OF POST-ENDOSCOPIC VARICEAL LIGATION (EVL) ULCER BLEEDING  B H Ooi <sup>1</sup> , N Mustaffa <sup>2</sup> , N A Che Hamzah <sup>2</sup> , H Helmy <sup>3</sup> , B P Ooi <sup>4</sup> , M R Hassan <sup>1</sup> , K K Kiew <sup>1</sup> <sup>1</sup> Hospital Sultanah Bahiyah, Kedah, Malaysia <sup>2</sup> Hospital Universiti Sains Malaysia, Kelantan, Malaysia <sup>3</sup> Universiti Malaysia Sarawak, Sarawak, Malaysia <sup>4</sup> Hospital Pulau Pinang, Pulau Pinang, Malaysia	52
OP O2	APC PROMOTER METHYLATION IN A COHORT OF COLORECTAL CANCER PATIENTS IN MALAYSIA  O Zulhabri <sup>1</sup> , I Hermawan <sup>2</sup> , M R Isa <sup>3</sup> , I Sagap <sup>4</sup> , A A Muhammad Azriff <sup>5</sup> , S M H Faradz <sup>2</sup> W Z Wan Ngah <sup>1</sup> , R Jamal <sup>1</sup> <sup>1</sup> UKM Medical Molecular Biology Institute (UMBI) Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia <sup>2</sup> Centre for Biomedical Research, Faculty of Medicine, Diponegoro University, Semarang, Indonesia <sup>3</sup> Department of Pathology , Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia <sup>4</sup> Department of Surgery, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia <sup>5</sup> Department of Oncology, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia	53
OP 03	FORWARD-VIEWING EUS-GUIDED NOTES INTERVENTIONS: A STUDY ON PERITONEOSCOPIC POTENTIAL  Aizan H <sup>1</sup> , Seo Dong-Wan <sup>2</sup> , Tae Jun-Song <sup>2</sup> , Kim Su-Hui <sup>3</sup> , Park Do-Hyun <sup>2</sup> , Lee Sang-Soo <sup>2</sup> Lee Sung-Koo <sup>2</sup> , Kim Myung-Hwan <sup>2</sup> <sup>1</sup> Department of Gastroenterology, UKM Medical Centre, National University of Malaysia, Kuala Lumpur, Malaysia <sup>2</sup> Department of Gastroenterology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea <sup>3</sup> Asan Institute for Life Sciences, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea	54
OP 04	PREVALENCE OF NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) AMONG PATIENTS IN THE OUTPATIENT DIABETIC CLINIC IN A MALAYSIAN TERTIARY CARE HOSPITAL Chan Wah-Kheong <sup>1</sup> , Alexander Tan Tong-Boon <sup>2</sup> , Vethakkan Shireene Ratna <sup>2</sup> Tah Pei-Chein <sup>3</sup> , Vijayananthan Anushya <sup>4</sup> , Goh Khean-Lee <sup>1</sup> <sup>1</sup> Gastroenterology and Hepatology Unit, Department of Medicine, Faculty of Medicine, University of Malaya <sup>2</sup> Endocrinology Unit, Department of Medicine, Faculty of Medicine, University of Malaya <sup>3</sup> Department of Dietetics and Nutrition, University of Malaya Medical Centre <sup>4</sup> Department of Bio-Medical Imaging, Faculty of Medicine, University of Malaya	55
OP 05	RANDOMIZED CLINICAL TRIAL: EFFECTS OF PROBIOTICS L CASEI SHIROTA ON FUNCTIONAL CONSTIPATION – A DOUBLE-BLIND, PLACEBO-CONTROLLED STUDY  M M Mazlyn <sup>1</sup> , A Fatimah <sup>1</sup> , L Nagarajah <sup>2</sup> , A K Norimah <sup>3</sup> , Goh Khean-Lee <sup>4</sup> <sup>1</sup> International Medical University, Kuala Lumpur, Malaysia <sup>2</sup> Open University Malaysia, Kuala Lumpur, Malaysia <sup>3</sup> Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia <sup>4</sup> University of Malaya, Kuala Lumpur, Malaysia	56

#### **OP 01**

# A COMPARATIVE STUDY ON HIGH DOSE VERSUS LOW DOSE ORAL ESOMEPRAZOLE IN PREVENTION OF POST-ENDOSCOPIC VARICEAL LIGATION (EVL) ULCER BLEEDING

B H Ooi<sup>1</sup>, N Mustaffa<sup>2</sup>, N A Che Hamzah<sup>2</sup>, H Helmy<sup>3</sup>, B P Ooi<sup>4</sup>, M R Hassan<sup>1</sup>, K K Kiew<sup>1</sup>

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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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 <sup>5</sup>Department of Oncology, Faculty of Medicine, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia

#### **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

Aizan H<sup>1</sup>, Seo Dong-Wan<sup>2</sup>, Jun Song-Tae<sup>2</sup>, Kim Su-Hui<sup>3</sup>, Park Do-Hyun<sup>2</sup>, Lee Sang-Soo<sup>2</sup> Lee Sung-Koo<sup>2</sup>, Kim Myung-Hwan<sup>2</sup>

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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  $62.8 \pm 10.7$ . 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 (000), central obesity (000), central obesity (000), central obesity (000), central obesity (000), 000), 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

M M Mazlyn<sup>1</sup>, A Fatimah<sup>1</sup>, L Nagarajah<sup>2</sup>, A K Norimah<sup>3</sup>, Goh Khean-Lee<sup>4</sup>

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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.

### **POSTER PRESENTATIONS**

PP 01	A CASE OF CLOSED LOOP SMALL BOWEL OBSTRUCTION WITHIN A STRANGULATED INCISIONAL HERNIA AND AN ASSOCIATED WITH AN ACUTE GASTRIC VOLVULUS Noorharisman <sup>1</sup> , P A Sutton <sup>2</sup> , N R Kosai <sup>1</sup> <sup>1</sup> Department of Surgery, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia <sup>2</sup> Institute of Translational Medicine, University of Liverpool, United Kingdom	64
PP O2	A CASE OF MELANOSIS COLI DUE TO TRADITIONAL COMPLEMENTARY MEDICINE S T Kew International Medical University, Seremban, Negeri Sembilan, Malaysia	65
PP 03	A CASE REPORT OF CHRONIC RIGHT ILIAC FOSSA PAIN SECONDARY TO YERSINIA INFECTION  Fazliza R, Mohd Firdaus G, Farhana M M, Soma B, Denise K Q H, Zawaniah B A, Rashide Y General Surgery Department, Hospital Sultan Abdul Halim, Sungai Petani, Kedah, Malaysia	66
PP 04	A COMPARISON OF TRANSARTERIAL ANGIOEMBOLIZATION VERSUS SURGERY AFTER FAILED ENDOSCOPIC THERAPY FOR NON VARICEAL UPPER GASTROINTESTINAL BLEEDING  F J Ruhi <sup>1</sup> , Y Yazmin <sup>2</sup> , R Razrim <sup>1</sup> , Z Rozman <sup>2</sup> , J Razman <sup>1</sup> , M R Dzulkhairi <sup>3</sup> , N R Kosai <sup>1</sup> Department of Surgery, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia  Department of Radiology, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia  Fakulti Perubatan & Sains Kesihatan, Universiti Sains Islam Malaysia, Selangor, Malaysia	67
PP 05	A RARE CAUSE OF A PANCREATIC HEAD MASS  B P Ooi <sup>1</sup> , B H Kong <sup>2</sup> <sup>1</sup> Hospital Pulau Pinang, Pulau Pinang, Malaysia <sup>2</sup> Hospital Bukit Mertajam, Bukit Mertajam, Pulau Pinang, Malaysia	68
PP 06	A RETROSPECTIVE ANALYSIS OF BARRETT'S OESOPHAGUS IN HOSPITAL KUALA LUMPUR  Jeevinesh Naidu, Shashi Kumar Menon, Mayleen Kok, Kavitha Balachandran Gastroenterology Unit, Department of Medicine, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia	69
PP 07	A REVIEW OF THE DIAGNOSTIC YIELD OF COLONOSCOPY FOR LOWER GASTROINTESTINAL BLEED: IS COLONOSCOPY JUSTIFIED FOR ALL LOWER GASTROINTESTINAL BLEED?  Ian C <sup>1</sup> , Jasiah Z <sup>1</sup> , Kanadasami P <sup>2</sup> , Mahadevan D <sup>1</sup> Department of Surgery, Tuanku Ja'afar Hospital, Seremban, Negeri Sembilan, Malaysia  International Medical University, Malaysia, Seremban, Negeri Sembilan, Malaysia	70
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 YY Loong <sup>1</sup> , Paul Yap <sup>1</sup> , Lye Munn-Sann <sup>2</sup>	71

<sup>1</sup>Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Serdang, Selangor, Malaysia <sup>2</sup>Department of Community Health and Epidemiology, Universiti Putra Malaysia, Serdang, Selangor, Malaysia

PP 09	ADRENAL HEMATOMA IS VERY RARE BUT POTENTIALLY LIFE THREATENING - RETROSPECTIVE CASES REVIEW C H Chew, S Narasimman, W J Tan Hospital Pulau Pinang, Pulau Pinang, Malaysia	72
PP 10	AIMS65 RISK ASSESSMENT AMONG PATIENTS PRESENTED WITH UPPER GI BLEEDING IN AMPANG HOSPITAL  Najib Azmi¹, Firdaus M S², T H Ng², Rosaida M S²  ¹Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, Kuala Lumpur, Malaysia ²Gastroenterology Unit, Hospital Ampang, Selangor, Malaysia	73
PP 11	AN AUDIT OF GASTRIC GISTS: A DECADE'S EXPERIENCE AT SARAWAK GENERAL HOSPITAL S Subramaniam, H A Mahendran, S L Siow Department of Surgery, Sarawak General Hospital, Kuching, Sarawak, Malaysia	74
PP 12	BOWEL PREPARATION FOR COLONOSCOPY: A PROSPECTIVE RANDOMIZED ASSESSMENT OF EFFICACY AND ADEQUACY OF BOWEL PREPARATION IN HOSPITAL INPATIENTS USING EITHER SAME DAY DOSING VERSUS SPLIT DAY DOSING OF POLYETHYLENE GLYCOL (PEG) (PRELIMINARY DATA)  W K Chan, S K Menon, M Kok, N Bahar, S Arjunan, ET Ooi Hospital Kuala Lumpur, Kuala Lumpur, Malaysia	75
PP 13	CASE REPORT OF STRONGYLOIDIASIS MIMICKING SYMPTOMS OF PROGRESSIVE LYMPHOMA K S Ng, B P Ooi Hospital Pulau Pinang, Pulau Pinang, Malaysia	76
PP 14	CERVICAL TERATOMA IN AN ADULT MASQUERADING AS THYROGLOSSAL CYST S Subramaniam, H A Mahendran, S L Siow Department of Surgery, Sarawak General Hospital, Kuching, Sarawak, Malaysia	77
PP 15	CLINICAL AND HISTOLOGICAL FOLLOW-UP OF A COHORT OF PATIENTS WITH NON-ALCOHOLIC FATTY LIVER DISEASE (NAFLD) Chan Wah-Kheong <sup>1</sup> , Cheah Phaik-Leng <sup>2</sup> , Ida Hilmi <sup>1</sup> , Goh Khean-Lee <sup>1</sup> <sup>1</sup> Gastroenterology and Hepatology Unit, Department of Medicine, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia <sup>2</sup> Department of Pathology, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia	78
PP 16	CLINICAL OUTCOME AND ADHERENCE TO LOCAL GUIDELINE ON THE MANAGEMENT OF BLEEDING PEPTIC ULCER AT KUALA KRAI DISTRICT HOSPITAL, KELANTAN IN 2011 C J Asri, I Hazimin, H M Jasni, A A Basir , H Norlida Endoscopy Unit, Surgical Department, Kuala Krai Hospital, Kelantan, Malaysia	79
PP 17	COLONOSCOPIC YIELD AMONG PATIENTS ABOVE 50 YEARS OLD IN HOSPITAL TUANKU JA'AFAR, SEREMBAN, 2006 - 2010 P Nanthini, Z Jasiah, D T Mahadevan Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan, Malaysia	80

PP 18	CT FEATURES OF METASTATIC LINITIS PLASTICA OF THE RECTUM- A CASE REPORT  A Che Aun <sup>1</sup> , H P Tee <sup>1</sup> , S Abdul Hamid <sup>1</sup> , N Fauzee <sup>1</sup> , K A Jaffar <sup>2</sup> , S Satwi <sup>1</sup> <sup>1</sup> Medical Department, Hospital Tengku Ampuan Afzan, Kuantan, Pahang, Malaysia <sup>2</sup> Kulliyah of Medicine, Universiti Islam Antarabangsa, Kuantan, Pahang, Malaysia	81
PP 19	DIAGNOSTIC ACCURACY OF EUS-FNA WITH ON-SITE CYTOTECHNICIANS TRAINED IN GENERAL CYTOLOGIC WORKS  C S Ngiu <sup>1</sup> , Sheikh Anwar Abdullah <sup>1</sup> , Aizan Hassanuddin <sup>1</sup> , Wong Zhi-Qin <sup>1</sup> , Tan Huck-Joo <sup>2</sup> <sup>1</sup> Gastroenterology and Hepatology Unit, Department of Medicine, National University of Malaysia Medical Centre, Kuala Lumpur, Malaysia <sup>2</sup> Sunway Medical Centre, Selangor, Malaysia	82
PP 20	DIAGNOSTIC ACCURACY OF M2PK - A NEW IMMUNOCHROMOTOGRAPHIC TESTING FOR COLORECTAL CARCINOMA (CRC) SCREENING: PRELIMINARY RESULTS S Suresh, Ida Hilmi, Goh Khean-Lee Division of Gastroenterology and Hepatology, Department of Medicine, Faculty of Medicine University of Malaya, Kuala Lumpur, Malaysia	83
PP 21	DIAGNOSTIC DILEMMA IN LARGE AND MULTIPLE LIVER LESIONS SOLVED WITH NON INVASIVE COMBINE ADVANCED IMAGING TECHNIQUES Arjunan S, Menon S K, Radhakrishnan A K, Ooi E T, Haniza, Mayleen K Gastroenterology Unit, Department of Medicine, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia	84
PP 22	ARTERIAL EMBOLIZATION OF A BLEEDING GASTRIC DIEULAFOY LESION: A CASE REPORT  M Y Rizal <sup>1</sup> , N R Kosai <sup>1</sup> , Rozman <sup>2</sup> , J Razman <sup>1</sup> , H Hanafiah <sup>1</sup> , Srijit Das <sup>3</sup> Department of Surgery, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia  Department of Radiology, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia  Department of Anatomy, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia	85
PP 23	ENDOSCOPIC ULTRASOUND-GUIDED RADIOFREQUENCY ABLATION OF PORCINE PANCREAS  Kim Hong-Jun <sup>1</sup> , Seo Dong-Wan <sup>1</sup> , Aizan H <sup>2</sup> , Kim Su-Hui <sup>3</sup> , Jang Ji-Woong <sup>1</sup> Park Do-Hyun <sup>1</sup> , Lee Sang-Soo <sup>1</sup> , Lee Sung-Koo <sup>1</sup> , Kim Myung-Hwan <sup>1</sup> Department of Gastroenterology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea  Department of Gastroenterology, UKM Medical Centre, National University of Malaysia, Kuala Lumpur, Malaysia  Asan Institute for Life Sciences, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea	86
PP 24	EOSINOPHILIC GASTROENTERITIS / COLITIS WITH EXTENSIVE SYSTEMIC INVOLVEMENT: AN UNUSUAL AND OVERLOOKED CAUSE OF UNRESOLVED DIARRHOEA P Sivakumar, P Shanthi, C S Ngiu, R Hamizah, Z Mazlam National University of Malaysia Medical Centre, Kuala Lumpur, Malaysia	87
PP 25	EPIDEMIOLOGY OF INFLAMMATORY BOWEL DISEASE IN MALAYSIA – THE FIRST INCIDENCE AND PREVALENCE STUDY Ida Hilmi¹, Fauziah Jaya², Andrew Chua³, Wong Choon-Heng⁴, Harjinder Singh⁵, Goh Khean-Lee¹ ¹Division of Gastroenterology, Department of Medicine, University of Malaya, Kuala Lumpur, Malaysia ²General Hospital, Ipoh, Perak, Malaysia ³Ipoh Gastroenterology Centre and Fatimah Hospital, Ipoh, Perak, Malaysia ⁴Ipoh Specialist Hospital, Ipoh, Perak, Malaysia ⁵Pantai Ipoh, Ipoh, Perak, Malaysia	88

>>>>>> 59 **<<<**<<<

PP 26	ESOPHAGEAL CANCER IN THE MALAYSIAN POPULATION Shir Ley T <sup>1</sup> , Ian C <sup>1</sup> , Shyangyee Lim <sup>1</sup> , Kandasami P <sup>2</sup> Department of Surgery, Hospital Tuanku Jaafar, Seremban, Negeri Sembilan, Malaysia  International Medical University, Seremban, Negeri Sembilan, Malaysia	89
PP 27	EXPERIENCE OF MANAGEMENT OF ACHALASIA IN A DISTRICT HOSPITAL – HOSPITAL SULTAN ABDUL HALIM – SUNGAI PETANI, KEDAH Fazliza R, Mohd Firdaus G, Farhana M M, Denise K Q H, Zawaniah B A, Damien C, Rashide Y General Surgery Department, Hospital Sultan Abdul Halim, Sungai Petani, Kedah, Malaysia	90
PP 28	FORWARD-VIEWING EUS-GUIDED NOTES INTERVENTIONS: A STUDY ON PERITONEOSCOPIC POTENTIAL  Aizan H <sup>1</sup> , Seo Dong-Wan <sup>2</sup> , Jun Song-Tae <sup>2</sup> , Kim Su-Hui <sup>3</sup> , Park Do-Hyun <sup>2</sup> Lee Sang-Soo <sup>2</sup> , Lee Sung-Koo <sup>2</sup> , Kim Myung-Hwan <sup>2</sup> <sup>1</sup> Department of Gastroenterology, UKM Medical Centre, National University of Malaysia, Kuala Lumpur, Malaysia <sup>2</sup> Department of Gastroenterology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea <sup>3</sup> Asan Institute for Life Sciences, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea	91
PP 29	FACTORS AFFECTING TUMOR ABLATION DURING HIGH-INTENSITY FOCUSED ULTRASOUND TREATMENT  Aizan H <sup>1</sup> , Seo Dong-Wan <sup>2</sup> , Kim Su-Hui <sup>3</sup> , Park Do-Hyun <sup>2</sup> , Lee Sang-Soo <sup>2</sup> , Lee Sung-Koo <sup>2</sup> , Kim Myung-Hwan <sup>2</sup> <sup>1</sup> Department of Gastroenterology, UKM Medical Centre, National University of Malaysia, Kuala Lumpur, Malaysia <sup>2</sup> Department of Gastroenterology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea <sup>3</sup> Asan Institute for Life Sciences, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea	92
PP 30	HELLER'S CARDIOMYOTOMY AND DOR'S FUNDOPLICATION FOR ESOPHAGEAL ACHALASIA: EVALUATION OF PATIENT SATISFACTION AND DISEASE-SPECIFIC QUALITY OF LIFE IN TUANKU JA'AFAR HOSPITAL Vikneswaran P¹, Mahadevan D Tata¹, Kandasami P³, Jasiah Z¹, Ramesh G², Dharmendran R¹¹Department of Surgery, Tuanku Ja'afar Hospital Seremban, Negeri Sembilan, Malaysia²Department of Surgery, Sunway Medical Centre, Selangor, Malaysia³International Medical University, Seremban, Negeri Sembilan, Malaysia	93
PP 31	HEPATIC VENOUS PRESSURE GRADIENT MEASUREMENT: SELAYANG HOSPITAL EXPERIENCE R Syed-Nasir, M S A Ismail, S S Tan Department of Hepatology, Selayang Hospital, Selangor, Malaysia	94
PP 32	JEJUNAL GASTROINTESTINAL STROMAL TUMOUR – AN IMPORTANT DIFFERENTIAL DIAGNOSIS IN ACUTE OBSCURE GASTROINTESTINAL BLEEDING  Shireen T <sup>1</sup> , Shyangyee Lim <sup>1</sup> , Ian C <sup>1</sup> , Andrew Gunn K B <sup>2</sup> , Kandasami P <sup>3</sup> Department of Surgery, Hospital Tuanku Jaafar, Seremban, Negeri Sembilan, Malaysia  Department of Surgery, Hospital Sultanah Aminah, Johor Bahru, Johor, Malaysia  Alternational Medical University, Seremban, Negeri Sembilan, Malaysia	95
PP 33	KLEBSIELLA PNEUMONIAE LIVER ABSCESS WITH METASTATIC LUNG ABSCESS IN A MAN WITH NEWLY DIAGNOSED DIABETES MELLITUS S H Yeap, N Matnor, N B Nazreen, A Nordin, K Abdullah, K Helmy, K K Sia Gastroenterology Unit Medical Department Hospital Tugnku Eguzigh Kangar Perlis Malaysia	96

PP 34	LONG TERM OUTCOME OF CHRONIC HEPATITIS C PATIENTS ON HEMODIALYSIS WITH SUSTAINED VIROLOGICAL RESPONSE C H Hoe, K K Kiew, E S Tan, Hassan M R Gastroenterology Unit, Medical Department, Hospital Sultananh Bahiyah, Alor Setar, Kedah, Malaysia	97
PP 35	LONG TERM PROTON PUMP INHIBITOR USE AND ITS ASSOCIATION WITH OSTEOPOROSIS  Hana Maizuliana S, Hamizah R, Suehazlyn Z, Nor Azmi K  Department of Medicine, Universiti Kebangsaan Malaysia Medical Centre, Kuala Lumpur, Malaysia	98
PP 36	LOW RATES OF HELICOBACTR PYLORI INFECTION IN HRPZ-II KOTA BHARU, KELANTAN - A 5-YEAR AUDIT Jaideep S, Rosemi S Hospital Raja Perempuan Zainab-II, Kota Bharu, Kelantan, Malaysia	99
PP 37	MALIGNANT PERITONEAL MESOTHELIOMA PRESENTING AS ASCITES OF UNKNOWN ORIGIN: A DIAGNOSTIC CHALLENGE  S Subramaniam, H A Mahendran, S L Siow Department of Surgery, Sarawak General Hospital, Kuching, Sarawak, Malaysia	100
PP 38	MANAGING THE CHALLENGES OF CROHN'S DISEASE WITH A COMPLEX ENTEROCUTANEOUS FISTULA: AN APPROACH TO RECONSTRUCTIVE SURGERY  Noorharisman, P A Sutton, N R Kosai  Department of Surgery, Universiti Kebangsaan Malaysia, Kuala Lumpur, Malaysia Institute of Translational Medicine, University of Liverpool, United Kingdom	100
PP 39	MASSIVE GASTROINTESTINAL BLEEDING FROM LEFT SIDED TYPHOID COLITIS  S Subramaniam, H A Mahendran, S L Siow Department of Surgery, Sarawak General Hospital, Kuching, Sarawak, Malaysia	101
PP 40	MECKEL'S DIVERTICULUM MANIFESTED BY OBSCURE GASTROINTESTINAL BLEEDING IN A MORBIDLY OBESE TEENAGER Fazliza R, Mohd Firdaus G, Farhana M M, Soma B, Denise K Q H, Rashide Y General Surgery Department, Hospital Sultan Abdul Halim, Sungai Petani, Kedah, Malaysia	101
PP 41	OCCLUSIVE AND NON-OCCLUSIVE VASCULAR COMPLICATIONS IN ACUTE PANCREATITIS PATIENTS: A CASE SERIES Evelyn H Y L, Jasiah Z, Kandasami P, Dharmendran R, Mahadevan D Tata Hospital Tuanku Ja'afar, Seremban, Negeri Sembilan, Malaysia	102
PP 42	OSTEOPOROSIS ASSOCIATED WITH INCREASED FRACTURE RISK, BUT NOT VITAMIN D LEVELS IN MALAYSIAN PATIENTS WITH INFLAMMATORY BOWEL DISEASE Ida Hilmi <sup>1</sup> , K Sunderesvaran <sup>1</sup> , Vijay Ananda <sup>2</sup> , S A Sarji <sup>3</sup> , Goh Khean-Lee <sup>1</sup> Division of Gastroenterology, Department of Medicine, University of Malaya, Kuala Lumpur, Malaysia  Division of Endocrinology, Department of Medicine, University of Malaya, Kuala Lumpur, Malaysia  Department of Biomedical Imaging, University of Malaya, Kuala Lumpur, Malaysia	103

PP 43	PILOT PROJECT TO DETERMINE THE PRESENCE OF CELIAC DISEASE IN HIGH RISK PATIENTS  R K Paramasivam <sup>1</sup> , S K Menon <sup>1</sup> , S Arjunan <sup>1</sup> , A K Radhakrishnan <sup>1</sup> , E T Ooi <sup>1</sup> , M Wong <sup>1</sup> , N Bahar <sup>1</sup> K Balachandran <sup>1</sup> , M Arip <sup>2</sup> , M M Ali <sup>3</sup> <sup>1</sup> Hospital Kuala Lumpur, Kuala Lumpur, Malaysia <sup>2</sup> Institute of Medical Research, Kuala Lumpur, Malaysia <sup>3</sup> Clinical Research Centre, Kuala Lumpur, Malaysia	104
PP 44	PRESCRIBING PATTERN OF PROTON PUMP INHIBITOR BY NON GASTROENTEROLOGIST IN A TERTIARY PUBLIC HOSPITAL IN MALAYSIA Menon S $K^1$ , Arjunan $S^1$ , Radhakrishnan A $K^1$ , Ooi $ET^1$ , Haniza $^1$ , Mayleen $K^1$ , Cheng L $Y^2$ , Nabila $N^2$ $^1$ Gastroenterology Unit, Department of Medicine, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia $^2$ Department of Pharmacy, Kuala Lumpur, Malaysia	105
PP 45	PRIMARY AND SECONDARY ERADICATION RATE OF HELICOBACTER PYLORI INFECTION: A RETROSPECTIVE OBSERVATIONAL STUDY PERFORMED IN HOSPITAL KUALA LUMPUR K L Cheong, A Saravanan, Rathakrishnan A K, ET Ooi, Arjunan S, Menon S K Hospital Kuala Lumpur, Kuala Lumpur, Malaysia	106
PP 46	PYOGENIC LIVER ABSCESS: KLEBSIELLA PNEUMONIAE AS PRIMARY PATHOGEN  Nurzarina Ahmed¹, Saravanan², Mahadevan Deva Tata¹ ¹Department of Surgery, Tuanku Jaʻafar Hospital, Seremban, Negeri Sembilan, Malaysia ²Department of Radiology, Hospital Selayang, Selangor, Malaysia	107
PP 47	RARE ANATOMICAL VARIATIONS OF EXTRAHEPATIC BIFURCATION OF COMMON HEPATIC DUCT  Azzyati A D, Rokayah J, Nik Azim N A, Tee S C  Department of Surgery, Sarawak General Hospital, Kuching, Sarawak, Malaysia	108
PP 48	REFLUX ESOPHAGITIS: A DESCRIPTIVE CROSS-SECTIONAL STUDY OF DEMOGRAPHY AND SPECTRUM OF CLINICAL MANIFESTATION IN HOSPITAL AMPANG  T H Ng, Rosaida M S, Najib Azmi, Firdaus M S Gastroenterology Unit, Medical Department, Hospital Ampang, Selangor, Malaysia Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, Kuala Lumpur, Malaysia	109
PP 49	REFLUX ESOPHAGITIS: A DESCRIPTIVE CROSS-SECTIONAL STUDY OF ENDOSCOPIC FINDINGS AND RISK FACTORS IN HOSPITAL AMPANG T H Ng, Rosaida M S, Najib Azmi, Firdaus M S Gastroenterology Unit, Medical Department, Hospital Ampang, Selangor, Malaysia Faculty of Medicine and Health Sciences, Universiti Sains Islam Malaysia, Kuala Lumpur, Malaysia	110
PP 50	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  lan C <sup>1</sup> , Kandasami P <sup>2</sup> , Mahadevan D <sup>1</sup> ¹Department of Surgery, Tuanku Ja'afar Hospital, Seremban, Negeri Seremban, Malaysia ²International Medical University, Seremban, Negeri Seremban, Malaysia	111

PP 51	SUSTAINED VIRAL RESPONSE (SVR) AMONG CHRONIC HEPATITIS C PATIENT POPULATION IN THE STATE OF PAHANG  H P Tee <sup>1</sup> , Y H Kwok <sup>2</sup> , S Y Wong <sup>2</sup> , A Che Aun <sup>1</sup> , K A Jaafar <sup>3</sup> , S Satwi <sup>1</sup> Department of Medicine, Hospital Tengku Ampuan Afzan, Kuantan, Pahang, Malaysia  Clinical Research Centre, Hospital Tengku Ampuan Afzan, Kuantan, Pahang, Malaysia  Kulliyyah of Medicine, International Islamic University of Malaysia, Kuantan, Pahang, Malaysia	112
PP 52	THE FREQUENCY OF BOWEL OPENING CAN BE ONE OF THE PREDICTOR FOR QUALITY OF BOWEL PREPARATION  Arjunan S <sup>1</sup> , Tandan Manu <sup>2</sup> , Baneerjee R <sup>2</sup> , Nageswar Reddy <sup>2</sup> <sup>1</sup> Gastroenterology Unit, Department of Medicine, Hospital Kuala Lumpur, Kuala Lumpur, Malaysia <sup>2</sup> Asian Institute of Gastorenterology, Hyderabad, Anthra Pradesh, India	113
PP 53	A CASE OF EXTRA-GASTROINTESTINAL STROMAL TUMOUR PRESENTING AS HEMORRHAGIC PANCREATIC CYST H T Heah, C H Chew, S Manjit, W J Tan General Surgery Department, Hospital Pulau Pinang, Pulau Pinang, Malaysia	114
PP 54	URGENT COLONOSCOPY IN PATIENTS WITH LOWER GASTROINTESTINAL BLEEDING: FASTER IS BETTER? ET Ooi, K L Ng, A Saravanan, S K Menon Hospital Kuala Lumpur, Kuala Lumpur, Malaysia	115
PP 55	USE OF FLEXIBLE ENDOSCOPE IN SHARP FOOD IMPACTION IN THE UPPER ESOPHAGUS: NONINVASIVE METHOD OF ASSESSMENT & TREATMENT	116
PP 56	ENDOLUMINAL CLIPPING VERSUS SURGERY IN THE MANAGEMENT OF IATROGENIC COLONIC PERFORATION: A DIRECT COST ANALYSIS  Chan Wah-Kheong <sup>1</sup> , April Camilla Roslani <sup>2</sup> , Law Chee-Wei <sup>2</sup> , Goh Khean-Lee <sup>1</sup> , Sanjiv Mahadeva <sup>1</sup> Division of Gastroenterology, Department of Medicine  Division of Colorectal Surgery, Department of Surgery, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia	117

#### PP 01

# 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



#### PP 02

# 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.

#### **PP 03**

#### 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.

#### PP 04

#### A COMPARISON OF TRANSARTERIAL ANGIOEMBOLIZATION VERSUS SURGERY AFTER FAILED ENDOSCOPIC THERAPY FOR NON VARICEAL UPPER GASTROINTESTINAL BLEEDING

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#### **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 = 0.17) 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.

#### PP 05

#### A RARE CAUSE OF A PANCREATIC HEAD MASS

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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.

#### PP 06

# 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), n=2), 9.06% had ulcer (n=57) with 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.

### 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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### **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 statiscal 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.

### **PP 09**

## ADRENAL HEMATOMA IS VERY RARE BUT POTENTIALLY LIFE THREATENING – RETROSPECTIVE CASES REVIEW

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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.

- 1. Canton E. Apoplexy of the suprarenal capsule. TransPathol Soc Lond. 1863;14:257.
- 2. Gomez RG, McAninch JW, Carroll PR. Adrenal gland trauma: diagnosis and management. J Trauma. 1993;35: 870-874.
- 3. Sevitt S. Post-traumatic adrenal apoplexy. J Clin Pathol. 1955;8:194.
- 4. Greendyke RM. Adrenal hemorrhage. Am J Clin Pathol. 1965;43:215.

### PP 10

## 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  $\ge$  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.

### **PP 11**

## AN AUDIT OF GASTRIC GISTS: A DECADE'S EXPERIENCE AT SARAWAK GENERAL HOSPITAL

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### **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 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.

### PP 12

# BOWEL PREPARATION FOR COLONOSCOPY: A PROSPECTIVE RANDOMIZED ASSESSMENT OF EFFICACY AND ADEQUACY OF BOWEL PREPARATION IN HOSPITAL INPATIENTS USING EITHER SAME DAY DOSING VERSUS SPLIT DAY DOSING OF POLYETHYLENE GLYCOL (PEG) (PRELIMINARY DATA)

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### **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%. Discusson: 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.

### **PP 13**

## CASE REPORT OF STRONGYLOIDIASIS MIMICKING SYMPTOMS OF PROGRESSIVE LYMPHOMA

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### **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.

### PP 14

## CERVICAL TERATOMA IN AN ADULT MASQUERADING AS THYROGLOSSAL CYST

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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 6<sup>th</sup> month of follow-up, no local recurrence was observed.

### PP 15

## 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  $57.8 \pm 11.0$ . Mean interval between the two liver biopsies was  $2343 \pm 265$  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.

### **PP 16**

# CLINICAL OUTCOME AND ADHERENCE TO LOCAL GUIDELINE ON THE MANAGEMENT OF BLEEDING PEPTIC 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.

### PP 17

## COLONOSCOPIC YIELD AMONG PATIENTS ABOVE 50 YEARS OLD IN HOSPITAL TUANKU JA'AFAR, SEREMBAN, 2006 - 2010

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#### 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.



### **PP 18**

### CT FEATURES OF METASTATIC LINITIS PLASTICA OF THE RECTUM-A CASE REPORT

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### **Background**

We described a case of advanced metastatic breath 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 paraortic 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 CYTOTECHNICIANS 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 cytopathalogist 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 includes 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.

	Colonoscopy results	
M2-PK test	CRC	No-CRC
positive	21	1
negative	4	49

Sensitivity = 21/25, 84.0% (95% Cl 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)

Diganotic 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.

### **PP 21**

## DIAGNOSTIC DILEMMA IN LARGE AND MULTIPLE LIVER LESIONS SOLVED WITH NON INVASIVE COMBINE ADVANCED IMAGING TECHNIQUES

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### 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 5cm, may give rise to symptoms or coagulopathy requiring intervention.

### Case report

A 64-years-old-Malay lady presented right hypochondiral pain, loss of weight and appetite. On examination noted hepatomegally(4-5cm) and other examinations were unremarkable. Patient's routine investigations, viral-screening and tumor-markers were normal. The Ultra-sonography(USG) of the Hepato-billiary-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 (9.5x13x13cm and 4.4x8.1x5.7cm 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**

Diuelafoys 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  $23.0 \pm 6.9$  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

### PP 24

# 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.

### PP 25

## 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 as 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.

### PP 26

### **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 eosphagus (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.

### PP 27

## EXPERIENCE OF MANAGEMENT OF ACHALASIA IN A DISTRICT HOSPITAL - HOSPITAL SULTAN ABDUL HALIM - SUNGAI PETANI, KEDAH

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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.

### **PP 28**

## 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

### PP 29

## 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

### PP 30

# HELLER'S CARDIOMYOTOMY AND DOR'S FUNDOPLICATION FOR ESOPHAGEAL ACHALASIA: EVALUATION OF PATIENT SATISFACTION AND DISEASE-SPECIFIC OUALITY OF LIFE IN TUANKU JA'AFAR HOSPITAL

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### **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 aathered.

#### 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 (ballon 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.

### **PP 31**

### 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.

### PP 32

## JEJUNAL GASTROINTESTINAL STROMAL TUMOUR - AN IMPORTANT DIFFERENTIAL DIAGNOSIS IN ACUTE OBSCURE GASTROINTESTINAL BLEEDING

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#### 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 Gl bleeding (malaena). All patients had upper and lower endoscopy performed on admission. No source of Gl 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.

### **PP 33**

## KLEBSIELLA PNEUMONIAE LIVER ABSCESS WITH METASTATIC LUNG ABSCESS IN A MAN WITH NEWLY DIAGNOSED DIABETES MELLITUS

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### 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 is 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 rediography 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.

### **PP 34**

## 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.

### **PP 35**

## LONG TERM PROTON PUMP INHIBITOR USE AND ITS ASSOCIATION WITH OSTEOPOROSIS

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### 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.

### **PP 36**

### LOW RATES OF HELICOBACTR PYLORI INFECTION IN HRPZ-II KOTA BHARU, KELANTAN - A 5-YEAR AUDIT

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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 Gl 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 at all 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.

### **PP 37**

## 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.

### **PP 38**

## 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 fistulain a patient with ileocaecalCrohn's diseasein which a large anterior abdominal wall defect was managed with reconstruction using a mesh and pedicled tensor fascia lata(TFL) mycocutaneous 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



### PP 39

### MASSIVE GASTROINTESTINAL BLEEDING FROM LEFT SIDED TYPHOID COLITIS

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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.

### PP 40

## MECKEL'S DIVERTICULUM MANIFESTED BY OBSCURE GASTROINTESTINAL BLEEDING IN A MORBIDLY OBESE TEENAGER

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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 haemetemesis. 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 esophagogastroduodenoscopy (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.

### PP 41

## OCCLUSIVE AND NON-OCCLUSIVE VASCULAR COMPLICATIONS IN ACUTE PANCREATITIS PATIENTS: A CASE SERIES

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### 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.

### PP 42

### OSTEOPOROSIS ASSOCIATED WITH INCREASED FRACTURE RISK, BUT NOT VITAMIN D LEVELS IN MALAYSIAN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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### 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  $45.1\pm17.40$  nmol/l but this was not significant when compared to the control group,  $44.15\pm12.53$  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.

### **PP 43**

### 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 antigliadin 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.

#### PP 45

# PRIMARY AND SECONDARY ERADICATION RATE OF HELICOBACTER PYLORI INFECTION: A RETROSPECTIVE OBSERVATIONAL STUDY PERFORMED IN HOSPITAL KUALA LUMPUR

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#### **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 etnicities (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.

#### PP 46

# PYOGENIC LIVER ABSCESS: KLEBSIELLA PNEUMONIAE AS PRIMARY PATHOGEN

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#### **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 septicaemic 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.

#### **PP 47**

# RARE ANATOMICAL VARIATIONS OF EXTRAHEPATIC BIFURCATION OF COMMON HEPATIC DUCT

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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).

#### **PP 48**

# REFLUX ESOPHAGITIS: A DESCRIPTIVE CROSS-SECTIONAL STUDY OF DEMOGRAPHY AND SPECTRUM OF CLINICAL MANIFESTATION IN HOSPITAL AMPANG

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#### 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 symtoms. 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.

#### **PP 49**

# REFLUX ESOPHAGITIS: A DESCRIPTIVE CROSS-SECTIONAL STUDY OF ENDOSCOPIC FINDINGS AND RISK FACTORS IN HOSPITAL AMPANG

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#### 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 know 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 symtoms of RE.

#### PP 50

# 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 oesophagoduedonoscopy 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 gastronintestinal bleed.

#### PP 51

# 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  $43.53 \pm 11.56$  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.

#### PP 52

# THE FREQUENCY OF BOWEL OPENING CAN BE ONE OF THE PREDICTOR FOR QUALITY OF BOWEL PREPARATION

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#### Backgroud/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%Cl 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.

#### PP 53

# A CASE OF EXTRA-GASTROINTESTINAL STROMAL TUMOUR PRESENTING AS HEMORRHAGIC PANCREATIC CYST

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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.

#### PP 54

# URGENT COLONOSCOPY IN PATIENTS WITH LOWER GASTROINTESTINAL BLEEDING: FASTER IS BETTER?

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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.

#### PP 55

# 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.



#### PP 56

# 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.