



The Hong Kong Society of Gastroenterology

香 港 腸 胃 學 會

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President Message

Message from Dr. Szeto Ming Leung, President

2005 has been a good and successful year for The Hong Kong Society of Gastroenterology. To continue our objective to promote the advancement of gastroenterology in Hong Kong, this Society organized two annual scientific meetings: the Annual General Meeting and Scientific Meeting and the 7th Joint Annual Scientific Meeting in March & August, 2005 respectively. Both meetings were well attended with the number of participants at 190 and 380 respectively. General responses to the interactive case discussions and interdisciplinary scientific programme were very favourable.

On research and education, this Society continued to monitor the progress of the two research projects of 2005 namely, *Coloscopic screening in first-degree relatives of Hong Kong Chinese patients with sporadic colorectal cancer* and *Non-erosive gastroesophageal reflux disease (NERD): a disease of excessive acid or visceral hypersensitivity?*

I wish to take this opportunity to thank the following friends and contributors of this Society: all fellows and members for their continuous support and contributions; Dr. Hui Wai Mo for editing the Newsletter; Dr. Lai Siu Wing for sharing with us his scientific updates, local and overseas speakers of our scientific meetings and session chairmen. Last but not the least, may I extend on behalf of the Society, our heartfelt thanks to friends from the pharmaceutical industry for their ready participation and generous sponsorship throughout the year. I look forward to the continued support and encouragement of all in future.

Best wishes for a Merry Christmas and Happy New Year!

Scientific Updates

EUS

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What is EUS?

EUS is not a new technology. It is an endoscope that incorporates an ultrasonic device at its tip, allowing visualization of the wall of the GI tract, as well as adjacent organs and tissue at great details. Under real-time ultrasound guidance, these structures and tumors could be examined thoroughly and in case of doubts, fine-needle-aspiration of the concerned structure/tumor could be done for cytological or even histological evaluation.

Competency in the EUS skill requires training for at least 6 - 12 months, and this markedly hinders the development of EUS in many hospitals across the world.

Risks associated with EUS

The risk of EUS is rather low. Since the procedure is performed under IV sedation, the risk associated with sedatives has to be included. The risk of major complication is only 0.5%. If FNA is contemplated, there is a very small theoretical risk of bacteremia or fever. Fine-needle-aspiration of the pancreas is associated with a 1% risk of pancreatitis. Particular caution is needed in patient with compromised cardiopulmonary function.¹

General indications

The indications of EUS are staging of malignancies, analysis of the stomach/bowel wall, and evaluation of the biliary tract and the pancreas. EUS provides accurate information about the T stages in the TMN classification, and it gives additional data about the regional lymph nodes (N stages). EUS is unable to image distant organs and we still rely on other modalities for M stages.

STAGING OF ESOPHAGEAL, STOMACH AND RECTAL MALIGNANCIES

Esophageal cancer

In a systematic review of the literature, the accuracy for T staging was 85-90% and 75% for N staging, compared with CT scan (50-60%)^{2,4}. The accuracy could further be enhanced to 93% by adding EUS guided FNA of the lymph nodes⁵. In clinical-decision analysis the surgeons considered the results of EUS examination as useful in 63-87% and changed the management plan in 16-32% of patients⁶.

There have been controversies whether advanced malignant esophageal stricture should be dilated for EUS examination (risk of perforation 10%) while some EUS probes were developed to traverse and examine such stricture. However, high-grade malignant esophageal stricture was generally associated with advanced local cancer with extensive lymph nodes and distant metastasis. Therefore some surgeons/oncologists/physicians advocate a more palliative/symptomatic control for these patients.

Stomach cancer

The ability of the EUS to pick up locally advanced cancer (T stages) and lymph nodes involvement was good, with the sensitivities ranging between 80-90%. However, the tumor is usually accompanied by intense inflammation and ulceration and both over-staging and under-staging may occur. The accuracy of the EUS was therefore only 60-80%^{7,8}.

In patients with Mucosa-Associated-Lymphoid-Tissue (MALT) lymphoma, EUS is not only important in the staging. If the MALT lymphoma involves only the mucosa or submucosa, it would be more likely to respond to a course of *Helicobacter pylori* eradication therapy⁹.

Rectal cancer

The tumor stages strongly determine the type of surgery and the extent of excision, and the needs of neoadjuvant chemoradiation therapy in those patients with locally advanced disease (T3/4 or N1). Again inflammation around the tumor may affect the staging, and the accuracies of EUS range between 63-93% for T-stages and 64%-83% for N-staging. The accuracy was best for pT3/4 tumor (89-94%) and worst for pT2 cancer (68%)¹⁰, similar to MRI or endorectal MRI. Cost-effective analysis comparing CT, EUS and MRI showed that CT plus EUS was the most cost-effective combination.

Early cancer in stomach, esophagus and colon

The accuracy of high frequency EUS probes in the determination of T1/2 stages, and T1m and T1sm stages was in the range of 90%^{11,12}. These cases are usually candidates of endoscopic mucosal resection (EMR).

STOMACH AND BOWEL WALL ANALYSIS

Submucosal tumor

It is frequent to encounter submucosal tumor during endoscopy. EUS allows accurate diagnosis of lipoma, pancreatic rest, cyst,

varix, etc. However, there are difficulties in the differentiation between a benign and malignant GI stromal tumor based on EUS features. Generally, a large tumor (>3cm), mixed echoic features, ill-defined edge, rapidly increase in size and presence of invasion suggest malignancy. A study showing the addition of EUS-guided FNA increased the diagnostic accuracy of malignant GI stromal tumor.¹³

BILIARY-PANCREATIC IMAGING

Pancreatic cancer

Endoscopic ultrasound has particular advantages over other imaging modalities in the management of pancreatic cancer. Firstly, it is very sensitive to pick up small mass in the pancreas (<1cm) to detect vascular invasion and regional lymph nodes metastasis. The accuracy of EUS was 92% as compared with 93% by helical CT according to one study. The two techniques are therefore complimentary¹⁴.

The ability to perform FNA is another major advantage over other modalities. The accuracy of FNA in the diagnosis and staging of pancreatic cancer increases to the range of 90%, compared with CT guided FNA (50%).

Most centers now agree that patients with pancreatic masses should undergo a helical CT scan to look for possible distant metastasis and invasion of adjacent organs or vessels. Patients with definite masses without metastasis/invasion should go to surgery, unless they are poor surgical candidates. Patients with suspected but unconfirmed invasion/peritoneal involvement, or patients that may benefit from chemotherapy would undergo an EUS-guided FNA. Patients with inoperable or untreatable advanced cancer, should be referred to palliative care.

Biliary cancer

There is relatively little data in biliary cancer. Biliary cancer spreads along the bile ducts and produces thickening of the bile duct epithelium under the EUS that may be confused with cholangitis changes. Interpretation of the FNA cytology was also very difficult. Recently a British group demonstrated good accuracy in the FNA of the portal lymph node involvement by the biliary cancer¹⁵. The new development of intraductal EUS (20MHz) probe that can be inserted via a guide-wire during ERCP allows easier technical access to the bile duct stricture as well as high-resolution differentiation of benign from malignant stricture. The use of Intraductal ultrasound (IDUS) had been recently evaluated in a few studies and the biliary tumor usually appeared as hypoechoic mass within the CBD. Intraductal spread of the biliary cancer could be observed and hence the proximal and distal margins of the tumor were delineated. Benign stricture usually appeared as concentric hyperechoic thickening of the bile duct wall¹⁶⁻¹⁹. CBD stones would be hyperechoic mass with acoustic shadow.

Chronic pancreatitis

Similar to the case of pancreatic cancer, EUS allows thorough evaluation of patients with chronic pancreatitis. The EUS features correlated strongly with both ERCP and IV secretin test in the diagnosis of chronic pancreatitis^{20, 21}. However, some elderly patients with low/no alcohol intake also demonstrated similar features. Wallace MB et al. proposed that the presence of six of these EUS features strongly predicted clinical chronic pancreatitis²².

Differentiation of pancreatic masses from patients with background pancreatitis may be very difficult. In this case, a guided FNA will be necessary^{23, 24}.

Neuroendocrine tumor

Most tumors were small (<2cm) and nearly all insulinomas are found in the pancreas and most gastrinomas are localized within the gastrinoma triangle. Zimmer R et al. showed that the sensitivity of EUS for gastrinoma was 79% as compared with somatostatin receptor scan (86%) and helical CT scan (29%). The sensitivity reached 93% in patients with insulinomas, as compared with somatostatin scan (14%) and CT scan (21%)²⁵.

EUS was demonstrated to be the most cost-effective initial imaging techniques in patients with suspected gastrinoma and it was the test of choice in patients with suspected insulinoma with a negative helical CT scan²⁶.

Cystic lesion of the pancreas

Cystic lesion of the pancreas as well as pseudocyst are often found. They are either serous or mucinous cystadenoma, or cystadenocarcinoma. Fine-needle-aspiration of the cystic fluid enhances the diagnosis of these lesions. The cystic fluid was analyzed for its amylase content, cytology, mucin staining and CEA²⁷. A high CEA level (>800ng/ml) strongly suggested malignancy but a low CEA level could not exclude it.

Aspiration of pseudocyst under EUS guidance enables drainage and analysis of the fluid as mentioned above. In patients with big persistent pseudocyst (with or without symptoms), drainage may be done via transgastric under EUS guidance²⁸.

Choledocholithiasis

As ERCP carries the risks of major complication at 4-5%, less invasive tests like EUS or MRCP are safer alternatives to patients with lower chance of choledocholithiasis (e.g. isolated dilated CBD in USG). Many studies showed that EUS was as accurate as ERCP in the detection of choledocholithiasis (Stones or sludges)²⁹. In general, MRCP (accuracy 90-93%) may not be not as good as EUS to see small CBD stones or sludges, but it could image the whole biliary tract. The availability of resources and expertise is also another factor to consider when ordering these tests.

Therefore, some institutions advocated EUS as the initial diagnostic tests in patients with suspected choledocholithiasis. Liu CL et al. found that in their patients with acute pancreatitis EUS correctly identified patients with CBD stones³⁰. In term of cost-effectiveness, EUS may be the best strategy if it is adopted as the first initial test, compared with ERCP and MRCP.

During ERCP, small stones or sludges may be missed by a normal cholangiogram. Again IDUS have been shown to be useful in the detection of these small stones/sludges with sensitivity equal to ERCP^{31, 32}.

Lung cancer

Lung cancer staging by EUS guided FNA forms the latest development of EUS. Patients with lung cancer and suspected mediastinal lymph nodes metastasis preclude them from any curative surgery and some of them require invasive mediastinoscopy. Studies revealed superior sensitivity (90%) and specificity (100%) by EUS-guided FNA over CT, in patients with posterior mediastinal lymph node and confirmed lung cancer. The major limitation was the inability to see the anterior mediastinum through the air-filled trachea. The overall sensitivity of EUS-guided FNA in the detection of mediastinal adenopathy was therefore 87% and specificity was 100%³³. Combined with PET scan, EUS guided-FNA could accurately detect N2/3 lung cancer and exclude them from more invasive surgery.

EUS-GUIDED INTERVENTION

Celiac nerve block is a procedure that allows adequate pain control with abdominal cancers. EUS-guided Celiac nerve block does not require the patient to adopt difficult postures as in CT guided or blind technique. The patients are then injected with lignocaine, followed by absolute alcohol into the celiac region. Most patients were managed as day case and they could achieve reduction or cessation of their opioid analgesic dosages³⁴.

EUS-guided gastric varix therapy is another reliable technique to prevent gastric variceal rebleeding. Lee YT et al. showed that if the thrombosis of the varix was confirmed by EUS, in patients with bleeding gastric varices treated with histocryl injection, the risk of rebleeding from these patients was much lower than patients without EUS assessment³⁵.

Conclusions

Endoscopic ultrasound is not a new technique and its accuracy is well established. However, it is not widely practiced, partly because of the difficulty to learn and master the technique, and also its

unavailability to many centers. The success of multimodalities treatment may be enhanced by the usefulness of EUS. There are also many competing technologies (MRI, PET scan and PET-CT scan). EUS-guided intervention is also an expanding area that includes pancreatic necrosectomy, endoscopic surgery, injection therapy to neoplasms. In our center, the success of the EUS service still requires a close liaison between our surgeons, radiologists, pathologists and GI physicians, and we hope that we would achieve a better care and outcome for our patients.

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Clinical Audit on Colonoscopy in the Medical Departments

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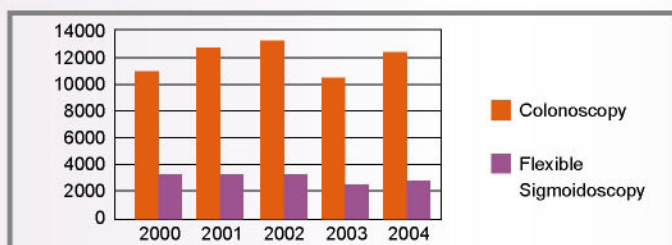
N. T.



Dr. Szeto Ming Leung

Background

Colonoscopy is a commonly performed endoscopic procedure. It is a major tool for the diagnosis of colonic cancer. Over 12,000 colonoscopies were performed yearly in the hospitals under the Hong Kong Hospital Authority.



Though very much operator dependent, colonoscopy is in general considered a safe procedure. However, serious complications such as perforation do occur. Audit reports of colonoscopy have been available from other countries but there are no data locally.

Objectives

To audit the procedure and outcome of colonoscopy performed in the Medical Departments of all the hospitals in the Hong Kong Hospital Authority.

Method

This audit was organized by the Quality Assurance Subcommittee of the Co-ordinating Committee in Internal Medicine. It was a retrospective review of the performance of colonoscopy in the medical departments of all the hospitals under the Hospital Authority. The audit period was from 1-1-02 to 31-3-02. All the departments were asked to fill in a 4-page audit form for every patient undergoing colonoscopy and sigmoidoscopy during the above period. The audit form included patient demographics, procedure demographics, indications and complications of colonoscopy.

Setting Standards

The medical literature was reviewed for setting standards for colonoscopy performance. The total colonoscopy rate (complete examination of the colon up to the caecum) ranges from 50% to 97% in international audit reports. The National Health Service(UK) recommendations in 1997 stipulated that the colonoscopy completion rate should be more than 85%.

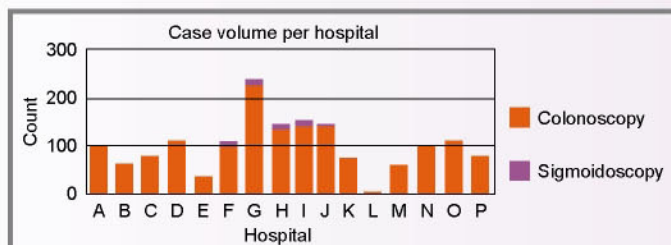
The colonic perforation rate ranges from 0.01% to 0.3% of all procedures. The rate of haemorrhage depends very much on whether the procedure is interventional. For colonoscopy alone, the rate is 0.03% but rises to 1.9% if polypectomy is also performed.

The following standards were set after the literature review.

1. Colonoscopy completion rate $\geq 85\%$
2. Colonoscopy perforation $\leq 0.2\%$
 - Diagnostic Colonoscopy $\leq 0.03\%$
 - Therapeutic Colonoscopy $\leq 1.9\%$
3. Haemorrhage $\leq 0.3\%$
4. Mortality $\leq 0.02\%$

Results

There were 1590 returns from 16 hospitals. 1553 were colonoscopies and 37 were sigmoidoscopies. The case volume per hospital varied widely. It ranged from more than 200 cases during that period to only 2 cases of sigmoidoscopy.



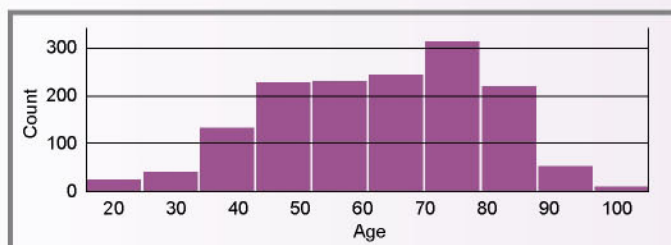
There were some missing data in the returns but they occurred in less than 5% of the parameters. For the major parameters such as perforation and haemorrhage, less than 1% had missing data. The missing data were not included in the analysis and the results were expressed as valid percentage.

Gender

	Number	Per cent
Male	725	46.7
Female	828	53.3

Age

The peak age was in the 70-80 age group



Procedure demographics

	Number	Per cent
Elective	1552	98.2
Emergency	28	1.8

Indications

The indications were compared to the appropriate indications from the American Society for Gastrointestinal Endoscopy. 98% of the procedures fell into the appropriate indications. The 4 most frequent indications were as follows:

1. Evaluation of unexplained gastrointestinal bleeding (41.6%)
2. Screening and surveillance for colonic neoplasia (29.3%)
3. Unexplained iron deficiency anaemia (20.9%)
4. Clinically significant diarrhoea that is unexplained (12.6%)

Endoscopists

	Number	Per cent
GI trainee under supervision	295	19.1
GI fellows	1250	80.8
Others	2	0.1

Most of the procedures were performed by GI fellows. 2 flexible sigmoidoscopies were performed by doctors not doing Gastroenterology.

Nature of Procedure

	Number	Per cent
Diagnostic	1124	72.5
Diagnostic and therapeutic	427	27.5

Sedation

	Number	Per cent
No	66	4.3
Yes	1479	95.7

Bowel Preparation

	Number	Per cent
Satisfactory	1329	86.2
Unsatisfactory	212	13.8

Total colonoscopy

	Number	Per cent
No	172	11.1
Yes	1377	88.9

Reasons for failed total colonoscopy

	Number	Per cent
Poor bowel preparation	46	28.6
Tumour/stricture	77	47.8
Looping	35	21.7
Complications	3	1.9

Procedure time

	Median procedure time
GI trainee under supervision	24 minutes
GI fellows	20 minutes
GI fellows were 4 minutes faster than the trainees but the difference was not statistically significant.	

Endoscopic findings

	Number	Per cent
Normal	574	37
Polyps	480	30.9
Tumour	149	9.6
Diverticula	140	9
Angiodysplasia	13	0.8
Haemorrhoids	274	17.7
Colitis	98	6.3
Stricture	11	0.7

It was noted that about 40% of the procedures revealed tumour or polyps. Haemorrhoid was a common finding.

Further procedures

	Number	Per cent
None	789	50.9
Biopsy	392	25.3
Polypectomy	433	27.9
Haemostasis	11	0.7

Complications

	Number	Per cent
No	1539	99.1
Yes	14	0.9

General complications

	Number	Per cent
Medication related	3	0.19
Cardiopulmonary	2	0.13
Others	4	0.26

These complications were uncommon and mild.

Specific complications

	Number	Per cent
Haemorrhage	2	0.13
Perforation (total)	4	0.26
(diagnostic)	3	0.27
(therapeutic)	1	0.23

Intervention

	Number	Per cent
Additional endoscopy	0	0
Radiological intervention	1	0.07
Surgery	5	0.34

Mortality

	Number	Per cent
	1	0.06

The mortality case

The patient was a 66 years old man with cancer of the ascending colon. There was perforation at the ascending colon with tumour necrosis. Laparotomy was performed and multiple liver metastases were noted at operation. He died 3 days post-operatively.

Other cases of perforation

Case 1

The patient was an 84 years old lady complaining of unexplained diarrhoea. Bowel preparation was poor and she was uncooperative during the procedure. The procedure was made more difficult probably because of adhesions due to previous hysterectomy. There was a 10-cm. perforation at the sigmoid colon. Hartmann operation was performed. Colonic biopsy revealed cytomegalovirus colitis. The patient was eventually discharged after a prolonged hospital stay.

Case 2

The patient was a 80 years old lady complaining of unexplained diarrhoea. There was perforation at the recto-sigmoid junction. Bowel preparation was satisfactory and the endoscopic findings were normal. She was discharged 7 days post-operatively.

Case 3

The patient was a 71 years old gentleman. Polyps were found at the transverse colon and polypectomy was performed using snare and hot biopsy. There was perforation at the transverse colon. Surgery was performed and he was discharged after a prolonged hospital stay.

It was noted that the endoscopists responsible for the cases of perforation were all GI fellows.

Sigmoidoscopy

There were only 37 cases of sigmoidoscopy during the audit period. The bowel preparation was in general worse than that for colonoscopy, being satisfactory in only 62.2%. There was 1 case of perforation. The patient was a 47 years old lady with chronic inflammatory bowel disease. Bowel preparation was satisfactory. Surgery was performed and the patient was discharged after 24 days. The endoscopist was also a GI fellow. The high percentage of perforation (2.7%) has caused some concern but it is difficult to draw any definite conclusion due to the small sample size.

Discussion and conclusion

Our performance is compared with the standards in the following table.

	Standard	Performance
Completion rate	≥ 85%	88.9%
Perforation rate(total)	≤ 0.2%	0.26%
Perforation rate(diagnostic)	≤ 0.03%	0.27%
Perforation rate(Therapeutic)	≤ 1.9%	0.23%
Haemorrhage	≤ 0.3%	0.13%
Mortality	≤ 0.02%	0.06%

Most of the colonoscopies were performed with the appropriate indications. This is reflected by the high percentage of abnormal endoscopic findings. In fact, 40% of the procedures revealed tumours or polyps. Bowel preparation was still a problem as it was unsatisfactory in 13.8%. The colonoscopy completion rate was good at 88.9% indicating good technique in general. However, the complication rates in terms of perforation and mortality were worse than the standard. Perforation in relation to polypectomy was infrequent but the perforation rate was high with diagnostic colonoscopy. Analysis of the cases of perforation showed that poor bowel preparation, adhesions due to previous surgery and interventional procedures were risk factors. It is difficult to make specific recommendations on colonoscopy training as all the cases of perforation were performed by the more experienced GI fellows.

This audit provides a crude picture of our performance in colonoscopy. It is quite small when compared to some international audit reports. For a more realistic evaluation of our performance, re-auditing with a bigger sample would be necessary.

Future auditing should include the surgical departments, which may have a higher caseload than the medical departments.

References

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5. Viala CH, Zimmerman M, Cullen DJ, Hoffman NE. Complication rates of colonoscopy in an Australian teaching hospital environment. *Intern Med J*. 2003 Aug;33(8):355-9.
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Events Highlights

Highlights from The Seventh Joint Annual Scientific Meeting

Dr. Chan Ka Leung Francis, Reader

Department of Medicine & Therapeutics, Prince of Wales Hospital

Date : August 27, 2005
Time : 2:00 - 9:00 p.m.
Venue : 3/F, Ballroom, Sheraton Hong Kong Hotel & Tower
Co-organizers : The Hong Kong Society of Gastroenterology
Hong Kong Society of Digestive Endoscopy
Hong Kong Society for Coloproctology
The Hong Kong Association for the Study of Liver Diseases
The Hong Kong Society of Gastrointestinal Motility
Sponsors : AstraZeneca, GlaxoSmithKline

August 27, 2005 marked another successful Joint Annual Scientific Meeting, the seventh in the series of co-organized meetings. 380 doctors attended this conference and took part actively in the panel discussions.

This year Drs. Hui Yui and Lai Kam Chuen presented the research findings on NASH and acid suppression vs clopidogrel, respectively in the Research Forum. Participants found this session very interesting and useful.

We were glad to have two renowned overseas speakers, Prof. Lars Lundell from Sweden and Prof. Jacob George from Australia to share with us at the meeting their experience and expertise. Their talks were on *GERD* and *Non-alcoholic Fatty Liver Disease* respectively. We were equally happy to have with us prominent speakers from Hong Kong including Doctors Justin CY Wu, Angus CW Chan, Chau Tai Nin, Lam Chi Ming, Simon KH Wong, Liu Chi Leung and Lai Kam Chuen. The presence of both overseas and local speakers and their stimulating presentations enabled a very substantial and attractive programme to be launched this year. Active participations and discussions were seen throughout the meeting. It was indeed a highly successful interdisciplinary scientific meeting.

Taking this opportunity, Dr. Francis Chan thanked all co-organizers, their members and the sponsors for their excellent work and participation and look forward to their continued cooperation in the coming year.



Annual General Meeting & Scientific Meeting 2006

Date: March 21, 2006 (Tuesday)
Venue: Ballroom, Langham Hotel, 8 Peking Road,
Tsimshatsui, Kowloon

All members and non-members of this Society are welcome
Free registration for all. If interested, please contact the
Society at telephone number 2869 5933.

Preliminary Programme

6:15 - 7:00 p.m.	Registration & Refreshments Viewing of Industry Exhibits
7:00 - 7:10 p.m.	Presentation of Honorary Fellowship Dr. Szeto Ming-leung
7:10 - 7:40 p.m.	The Current Status of NERD Diagnosis Professor Lin San-Ren Division of Gastroenterology Peking University No.3 Hospital Hua Yuan Bei Road, Beijing 100083 China
7:40 - 8:10 p.m.	H. pylori, Reflux disease and Oesophageal Adenocarcinoma Are there clinically important relationships? Professor John Dent Director, Department of Gastrointestinal Medicine Royal Adelaide Hospital North Terrace, Adelaide SA 5000 Australia
8:10 - 8:20 p.m.	Plenary discussion
8:20 - 8:45 p.m.	AGM Tea & Viewing of Exhibits
8:45 - 10:00 p.m.	Dinner

Welcome! New fellow

Dr. Lok Ka Ho
Department of Medicine & Geriatrics
Tuen Mun Hospital

January 13-14, 2006

Hong Kong Surgical Forum - Winter 2006

Organizer : Department of Surgery,
University of Hong Kong and
Hong Kong Chapter of American College of Surgeons
Website : <http://www.hku.hk/surgery>

February 9-11, 2006

XVIIIth Belgian Week of Gastroenterology

Organizer : Belgian Week of Gastroenterology
Location : Oostende, Belgium
Website : www.belgianweek.be

February 12-14, 2006

European Multidisciplinary Colorectal Cancer Congress 2006

Organizer : European Society of Surgical Oncology
Location : Berlin, Germany
Website : <http://www.colorectal2006.org>

February 22-25, 2006

10th World Congress of the International Society for Diseases of the esophagus

Organizer : The International Society for Diseases of the esophagus
Location : Adelaide, South Australia
Website : www.isde.net

March 25-28, 2006

Shanghai-HK International Liver Congress 2006

Organizer : Cheng Si Yuan (China-Int'l) Hepatitis Research Foundation
Location : Shanghai International Convention Centre
Website : www.livercongress.org/en/hepa2004/sponsor.htm

April 26-30, 2006

41 Annual Meeting of the European Association for the Study of the Liver

Organizer : Vienna, Austria
Website : www.easl.ch/future_annual_meetings.htm

October 9-14, 2006

Australian Gastroenterology Week 2006

Organizer : Gastroenterological Society of Australia
Location : Adelaide, Australia
Website : www.gesa.org.au/meetings/agw/dates.htm



March 21, 2006

Annual General Meeting & Scientific Meeting 2006

Organizer : The Hong Kong Society of Gastroenterology
Location : Langham Hotel
Website : www.hksge.org



October 21-25, 2006

14th United European Gastroenterology Week

Organizer : The United European Gastroenterology Federation
Location : Berlin, Germany
Website : www.uegf.org