President Message

Message from Dr. Yat-Wah Yeung, President

Amidst the global financial crisis, The Hong Kong Society of Gastroenterology continues to promote the advancement of gastroenterology in Hong Kong. The Annual General Meeting & Scientific Meeting of the Society held on 12 March 2009 with topical presentations of prominent local and overseas speakers was successful and well attended.

On behalf of the Society, I wish to express my gratitude to all who have contributed to the Society: Dr. Justin Wu for organizing the 2009 Annual General Meeting & Scientific Meeting, Dr. Wai-Mo Hui for editing this Newsletter, Prof. Angel Lanas, Dr. Pietro Lampertico and Dr. Philip Chiu for contributing to the scientific updates in this Newsletter and to the friends from the pharmaceutical industry for their generous sponsorship and efforts.

May I take this opportunity to welcome all new members, fellows and honorary fellows who have recently joined the Society and look forward to their support and active participation in the forthcoming events.

Scientific Updates

Management of aspirin and non-steroidal anti-inflammatory drug (NSAID)-related gastrointestinal (GI) complications: A European perspective

Professor Angel Lanas
Service of Gastroenterology
University Hospital
Zaragoza, Spain

NSAIDs, including aspirin, are widely used for treating various musculoskeletal conditions. Many GI side effects are associated with their use. Professor Lanas discussed the management of GI complications arising from aspirin and NSAID use, from a European perspective.

Risks of NSAIDs and aspirin use

NSAIDs and aspirin use is associated with many GI complications including dyspepsia (> 25%), peptic ulcers and peptic ulcer complications, especially in patients with risk factors (age > 60 years, previous ulcer history, use of high-dose NSAIDs, concomitant use of corticosteroids or anticoagulants). A study in Spain has revealed that 8.2–12.2% of all GI complications and deaths were attributed to low-dose aspirin use. There has been an increasing trend towards prescription of NSAIDs and aspirin, especially for treating rheumatoid arthritis and osteoarthritis. As a result, these drugs are now more common causes of peptic ulcer disease than Helicobacter pylori infection. A study in Spain has revealed that mortality is around 15.3 cases/100,000 people who take NSAIDs and aspirin. Use of aspirin and NSAIDs is also associated with lower GI bleeding and the associated incidence of complications is comparable with that of upper GI complications.

Reducing the risks of NSAID and aspirin use

The risks of NSAID-induced toxicity can be reduced by implementing the following prescribing practices:

Prescription of the safest NSAID

Professor Lanas recommended that the safest NSAID be used, in the lowest possible dose, for the shortest possible time, to reduce the risks of NSAID-related GI complications (Figure 1).
CI—confidence intervals; RR—relative risk

Eradication of H. pylori infection

A study has revealed that eradication of H. pylori infection before starting NSAID therapy reduces the risk of peptic ulcer.

Avoiding combinations of aspirin with NSAID or COX-2 inhibitors

Studies have revealed that combining aspirin with other NSAIDs or COX-2 inhibitors raises the relative risk of upper GI complications.

Co-therapy of traditional NSAID with proton pump inhibitors (PPIs)

Several studies have shown that combining NSAID with a PPI reduced the risk of ulcer bleeding in patients taking NSAIDs and also the risk of recurrent bleeding in high-risk patients. A decline in ulcer bleeding complications was observed in Spain with an increased use of PPI (Figure 2).

Figure 2. Use of PPI and decreased rates of peptic ulcer complications in Spain

However, PPI therapy should be used with caution, bearing in mind the risks associated with its use, such as the potential risk of hip fracture, gut infections, and side effects that are low in frequency and need to be confirmed in further studies.

Conclusions

Professor Lanas concluded that NSAIDs and aspirin are drugs of choice for treating many health conditions. The risk of developing GI complications with their use can be controlled to some extent with the use of PPI co-therapy and by modifying prescribing practices. The risks and benefits of the therapy should be evaluated in individual patients to minimize GI complications.

References

Management and prevention of nucleos(t)ide analogues (NUC) resistance

Pietro Lampertico
1st Gastroenterology Unit
Fondazione Policlinico Mangiagalli e Regina Elena
University of Milan
Milan, Italy

Long-term NUC-based suppressive therapy for treating chronic hepatitis B virus (HBV) infection may lead to development of drug resistance and subsequent progressive increase in serum HBV DNA and alanine aminotransferase (ALT) levels, histological progression and clinical decompensation, as well as liver failure.

Types of resistance
Studies have shown that after 4–5 years of lamivudine treatment, resistance develops in up to 70% of the patients, remarked Dr Lampertico at the 10th Joint Annual Scientific Meeting in Hong Kong. NUC resistance may be detected by regular monitoring of HBV DNA by polymerase chain reaction (PCR) assay. Three clinically relevant definitions are used for describing NUC resistance, which are applicable to all NUC:

- Genotypic resistance
- Virological breakthrough
- Clinical breakthrough

These three phases are part of the same process, i.e., development of drug resistance. If changes in treatment are not made at the appearance of genotypic resistance, the patient ultimately lands with virological breakthrough and later with clinical breakthrough, when all the clinical consequences of resistance also appear.

Thus, development of NUC resistance is not just a biological problem but also a clinical problem, as elevation of ALT levels if left untreated, will result in disease progression.

Managing lamivudine drug resistance

Changing the drug
A cross-resistance drug profile showing the specific positions of mutations to different drugs is done to decide which drug should be used to replace the resistant drug. This way drugs with similar resistance profiles are avoided. Generally, if the treatment has begun with a nucleotide analogue, the rescue drug would be a nucleoside analogue and vice versa.

Add-on therapy
Studies have shown that adding another drug may have better results in terms of reducing resistance development, disease progression and liver-related complications. This strategy is recommended by most international guidelines for treating lamivudine resistant patients.

A study by Dr Lampertico and co-workers in lamivudine resistant cirrhotic patients, followed for 3 years, has shown that with the use of combination therapy of lamivudine and adefovir, there was:

- Undetectable viremia (HBV DNA < 35 copies/mL) in most patients
- No development of virological breakthrough
- No development of genotypic resistance to adefovir

In this study, add-on therapy successfully prevented clinical decompensation in lamivudine resistant cirrhotic patients followed for 4 years. However, hepatocellular cancer (HCC) was not completely prevented and occurred in 15% of the study patients.

Early add-on therapy
In one study, Dr Lampertico and his team started early add-on therapy for lamivudine resistant patients in the virological breakthrough phase, when viraemia was low, ALT levels were normal and there were no signs of clinical decompensation. It was observed that virological and biochemical responses, measured in terms of viraemia and ALT levels, were better than in those in who started rescue treatment in the clinical resistance phase (Figures 1 and 2). This shows that prognosis is better when rescue treatment is started sooner. Also, this regimen prevented ALT reactivation and further progression to hepatic decompensation, even in cirrhotic patients. Dr Lampertico will soon be publishing these study results.

Figure 1. Early add-on therapy produces better virological response

![Virological response by baseline viraemia](image)

ADV–adefovir; LAM–lamivudine; LAM-R–lamivudine resistant
Prevention of NUC resistance

Development of NUC resistance may be prevented by adopting the following treatment strategies:

1. Careful selection of patients for NUC treatment
   Patients may be treated with interferon if the degree of hepatitis is mild and NUC treatment considered if it progresses or worsens.

2. Early rescue treatment
   Rescue treatment may be started as early as after 24 weeks in partial responders to low genetic barrier drugs such as lamivudine and telbivudine (patients who are PCR positive for HBV DNA after 24 weeks of treatment) to prevent development of genetic resistance.

3. De-novo combination therapy
   Treatment may be started with a combination of interferon and NUC or a combination of nucleotide and nucleoside analogue to prevent early development of resistance.8,10

Conclusions

Regular monitoring of HBV DNA by PCR assay should be done for detection of NUC resistance. The rescue drug should be identified based upon a different cross resistance profile. The best strategy is to use an add-on drug, which should be implemented as early as possible, to limit viral replication, prevent clinical decompensation and further resistance development. Prevention of NUC resistance is possible by careful selection of patients for NUC treatment and early treatment adaptation in partial responders.

References


Endoscopic submucosal dissection of early gastrointestinal tumours

Philip WY Chiu

Associate Professor, Honorary Consultant
Department of Surgery, Prince of Wales Hospital
Institute of Digestive Disease
The Chinese University of Hong Kong
Hong Kong

According to the World Health Organization (WHO) regional statistics in 2004, GI cancers are the leading causes of death in Asia. Endoscopic submucosal dissection is a local, curative, novel treatment technique, associated with good organ preservation and post-operative outcome. It can achieve complete, en-bloc resection of early GI cancers with a wider margin.

Diagnosis and treatment of early gastric cancer

Worldwide, early gastric cancer has an excellent prognosis, with a survival of about 90% if detected and treated in time. Depending on the associated risk of lymph node metastasis, the treatment options for early gastric cancer include local treatment [endoscopic mucosal resection (EMR) and endoscopic submucosal dissection (ESD)] and loco-regional treatment [laparoscopic gastrectomy].
**EMR**

This modality of local treatment, with minimal risk of lymph node metastasis, has many advantages, including:
- Preservation of organ function
- Better quality of life
- Less post-gastrectomy syndromes
- Shorter hospital stay
- Painless
- Early return of GI function

Intramucosal early gastric cancers with ulceration (size up to 30 mm) and without ulceration (any size) can be treated with this modality. The stage of the disease is determined with the use of magnifying endoscopy and endoscopic ultrasound.

Magnifying endoscopy is used to look for the subepithelial capillary network (SECN) patterns and diagnose whether the lesion is well differentiated (irregular, dilated and tortuous SECN) or poorly differentiated (absence of SECN). A study has shown that the negative predictive value of the disappearance of SECN for diagnosing gastric carcinoma was 100%. In another study, the absence of a well-structured ‘pit pattern’ by magnifying endoscopy, predicting a submucosal spread of early gastric cancer, was found to be 83% accurate, 97% sensitive and 81% specific.

The accuracy of endoscopic ultrasound for diagnosing early gastric cancer was about 78-81% in 2 different studies. Studies have suggested that endoscopic resection is indicated in tumours < 2 cm, without ulcer fibrosis and good degree of differentiation.

The main disadvantage of EMR is that the size of specimen obtained is less than 2 cm. For any tumour larger than 2 cm, a piecemeal resection must be performed. This is associated with a risk of remnant tumour at the edges after resection that may increase the risk of local recurrence.

**ESD**

This treatment modality enables en-bloc resection of tumour with wider margins, thus reducing local recurrence. Two types of devices are used for achieving this.

1. Insulated devices
   These include the IT and IT7 knives with ceramic tips that prevent perforation during the procedure. Skill is required for good control of the endoscope and its manipulation.

2. Sharp knife without insulation
   This cuts in all directions, but also requires good manipulation skills to prevent perforation.

A study has shown that endoscopic submucosal dissection using a combination of the two knives was effective and safe.

**Diagnosis and treatment of early oesophageal cancer**

Early oesophageal cancer is usually asymptomatic and hence difficult to diagnose. Screening endoscopies of high-risk patients may help in early diagnosis. High-risk patients include:
- Patients with head and neck cancers
- People with a history of heavy smoking and drinking > 10 years
- Patients with a history of oesophageal squamous cell carcinoma treated with chemotherapy
- People living in high-risk regions, like northern China

Early oesophageal cancer, characterized by increased vascularity [intra-papillary capillary loop (IPCL) patterns] and slight mucosal irregularity, is diagnosed by narrow band imaging and magnifying endoscopy. Lesions without lymph node metastasis may be endoscopically resected. Patients are hospitalized for 3 days after the procedure and receive close intravenous PPIs. The first follow-up endoscopy is done after 3–6 months, followed by a yearly follow-up, to detect recurrence or de-novo lesions.

**Conclusions**

Meticulous endoscopy can detect early gastric cancer and early oesophageal cancer. En-bloc resection with ESD is a novel technique that can achieve complete resection of early GI cancer in one piece and with a wide margin.

**References**

Highlights from Annual General Meeting and Scientific Meeting
12 March 2009, Langham Place Mongkok, Hong Kong

Dr. Justin C.Y. Wu
Associate Professor
Institute of Digestive Disease
Department of Medicine & Therapeutics
The Chinese University of Hong Kong

It was a successful scientific meeting attended by approximately 112 specialists and medical professionals. Professor Geoffrey C. Farrell, the distinguished guest from Australia, was awarded Honorary Fellowship of the Society. In commemoration of the award, a plaque of the Society was presented by Dr. Yeung Yat-Wah, President of the Society, to Professor Farrell.

Professor Farrell then delivered a captivating presentation on “Is fat bad for the liver?”

The other distinguished guest to receive the award, Professor Daming Fan from the Fourth Military Medical University in Xian, China was unable to come to Hong Kong to receive it in person.

Dr. Justin Wu delivered a contingent presentation on “Updates in Management of Peptic Ulcer” which was very informative and well received.

Discussion followed as actively participated.

The subsequent AGM was attended by 42 members during which the Society’s annual report and financial statements for the year of 2008 were presented by the Chairman and Hon. Treasurer respectively. Six members were elected to the Council for the term 2009-2011 increasing the total number of the members in the Council to 14.

Before dinner started, a Certificate of Appreciation was presented to each of the nine sponsors in appreciation of their support and contributions towards the Meeting and they were AstraZeneca, B. Braun, Bristol-Myers Squibb, Eisai, Ferring, GlaxoSmithKline, Novartis, Roche and Takeda.

Most participants stayed after the Meeting and continued with exchange of views while enjoying the dinner.

News ….

Welcome! New Members and Fellows

Honorary Fellows
Professor Geoffrey C. FARRELL
Director of Gastroenterology & Hepatology
The Canberra Hospital, Australia
Professor of Hepatic Medicine
Australian National University, Australia

Professor Daming FAN
President
The Fourth Military Medical University
Xian, China

Fellows
Dr. CHEUNG Wing I
Department of Medicine & Geriatrics
United Christian Hospital

Dr. James Yan Yue FUNG
Department of Medicine
Queen Mary Hospital

Dr. Ivan Fan Ngai HUNG
Department of Medicine
Queen Mary Hospital

Members
Dr. LAI Hin
Department of Medicine & Therapeutics
Prince of Wales Hospital

Dr. LO Fu Hang
Department of Medicine
United Christian Hospital

Dr. LUI Ka Luen
Department of Medicine & Geriatrics
Tuen Mun Hospital

Dr. NG Chi Ho
Department of Medicine
Tuen Mun Hospital

Dr. SAY Chun Yu
Department of Medicine & Geriatrics
Caritas Medical Centre

Congratulations to Dr. LAI Hin who has been selected to attend the Gastro 2009 Young Clinicians Program.

Young Investigators Award of International Forum of JSGE 2010
Application deadline: 30 September 2009
http://www.hksge.org/home.htm
Major Meetings

11th Joint Annual Scientific Meeting 5 September 2009 1:00 ~ 6:15 p.m. Level 7, Langham Place Mongkok Kowloon, Hong Kong Co-sponsors: AstaZeneica, GlaxoSmithKline Organizing Chairperson: Dr. Annie O.O. Chan

Co-organizers:
The Hong Kong Society of Gastroenterology
Hong Kong Society of Digestive Endoscopy
Hong Kong Society for Colo-Proctology
The Hong Kong Association for the Study of Liver Diseases
The Hong Kong Society of Gastrointestinal Motility

Speakers
Prof. John Dent (Australia)
Prof. Benjamin C.Y. Wong (HKU)
Prof. Joseph J.Y. Sung (CUHK)
Prof. Ronnie T.P. Poon (HKU)
Dr. Philip C.H. Kwok (QEH)
Dr. James Y.Y. Fung (HKU)
Dr. Ralf Kieslich (Germany)
Dr. John Chan (HKSH)

Topics
Epidemiological Study in China on GERD
Management of Refractory GERD
Recent advances in the therapy of peptic ulcer bleeding
Surgical Treatment of HCC
Diagnosis and interventional radiological treatment of HCC: the essentials
New Perspectives in CHB Therapy
Update on confocal endomicroscopy - from in vivo histology to molecular imaging
CT Colonography - An update

More details will be available later from www.hksge.org/event

11-12 June 2009
Endoscopy Live in Amsterdam 2009
Organizer: World Organization of Digestive Endoscopy
Location: Amsterdam, The Netherlands
www.eggo.nl/life/Events_Calendar

10-11 June 2009
8th International Gastric Cancer Congress
Organizer: International Gastric Cancer Association
Location: Kos, Poland
www.igca.pl

16-21 June 2009
GILhex Singapore 2009
Organizer: Gastroenterological Society of Singapore
Chapter of Gastroenterologists
College of Physicians, Singapore
Society of Colorectal Surgeons (Singapore)
Location: Singapore
www.gilhex.org.sg

24-27 June 2009
11th World Congress on Gastrointestinal Cancer
Organizer: European Society for Medical Oncology
Location: Barcelona, Spain
www.worldgdcancer.com

25-27 June 2009
9th National Congress on Gastrointestinal Cancer
Organizer: European Society for Medical Oncology
Location: Barcelona, Spain
www.worldgdcancer.com

8-11 July 2009
ILTS 15th Annual International Congress
Organizer: International Liver Transplantation Society
Location: New York City, USA
www.ILTS.org/meetings/15th

4-6 September 2009
ILCA 2009 Third Annual Conference
Organizer: International Liver Cancer Association
Location: Milan, Italy
www.ilcaonline.org

6-10 September 2009
2009 International Surgical Week
Organizer: International Society of Surgery
Location: Adelaide, Australia

11-12 September 2009
Falk Symposium 17b: IBD and IBS: Novel Mechanisms and Future Practice
Organizer: Falk Foundation
Location: Glasgow, Great Britain
www.dfalkpharma.de

17-18 September 2009
3rd European Meeting Group for Endoscopic Ultrasonography
Coordinated by: Oasis Vajres
Location: Barcelona, Spain

23-25 September 2009
8th International Meeting on Therapy in Liver Diseases
Coordinated by: Oasis Vajres
Location: Barcelona, Spain

23-26 September 2009
19th World Congress of the International Association of Surgeons, Gastroenterologists and Oncologists
Organized by: Chinese Society for Surgery
Chinese Medical Association
Location: Beijing, China
www.iagso.org

24-26 September 2009
EASL Special Conference “NAFLD-NASH and Related Metabolic Disease”
Organizer: European Association of the Study of Liver (EASL)
Location: Bologna, Italy
www.easl.eu/meetingactivities/last.asp

27-30 September 2009
Asian Pacific Digestive Week 2009 (APDW 2009)
Hosted by: The Chinese Taiwan Gastroenterological Society & The Chinese Taiwan Society of Digestive Endoscopy
Location: Taipei, Taiwan
www.apdw2009.org

1-2 October 2009
1st International Summit on Fibrotic Complications of Gastrointestinal Diseases
Organizer: Cleveland Clinic
Location: Cleveland, Ohio, USA

3-5 October 2009
The 2009 Gastrointestinal Oncology Conference
Organizer: International Society of Gastrointestinal Oncology
Location: Philadelphia, USA
www.isgog.org/issue2009

3-7 October 2009
16th International Symposium on Hepatitis C Virus and Related Viruses
Endorsed by: European Association of the Study of Liver (EASL)
Location: Nice, France
www.hc2009.org

14-17 October 2009
Japanese Digestive Disease Week (JDDW)
Organizers: Japanese Society of Gastroenterology
Japanese Gastroenterological Endoscopy Society
Japanese Society of Hepatology
Japanese Society of Gastroenterological Cancer Screening
Japanese Society of Digestion and Absorption
Location: Kyoto, Japan
www.jddw.jp

15-16 October 2009
FALK LIVER CONFERENCE (Part I)
Organizer: Falk Foundation
Location: Hannover, Germany
www.dfalkpharma.de

16-18 October 2009
FALK LIVER CONFERENCE (Part II)
Liver and Metabolic Syndrome
Organizer: Falk Foundation
Location: Hannover, Germany
www.dfalkpharma.de

21-24 October 2009
Australian Gastroenterology Week (AGW)
Organizer: Gastroenterological Society of Australia
Location: Sydney, Australia
www.gsa.org.au/activities/Renmark

21-28 October 2009
The AGC 2009 Annual Scientific Meeting & Postgraduate Course
Organizer: American College of Gastroenterology
Location: San Diego, CA, USA
www.acg.gi.org/acmeweek

30 October - 3 November 2009
The Liver Meeting 2009 and AASLD's 60th Annual Meeting
Organizer: American Association for the Study of Liver Diseases
Location: Boston, MA, USA
www.aasld.org/theLivermeeting

4-6 November 2009
9th Asia Pacific Congress of Endoscopic and Laparoscopic Surgeons of Asia (ELSA 2009)
Hosted by: Chinese Society of Endoscopic and Laparoscopic Surgery
Location: Xiamen, China
www.elsa2009.com

8 November 2009
International Symposium on Hepatology 2009 / 22nd Annual Scientific Meeting
Organizer: The Hong Kong Association for the Study of Liver Diseases
Location: Hong Kong Convention Exhibition Centre
www.hongkongmed.com/elsa2009

11-13 November 2009
New Zealand Society of Gastroenterology Annual Scientific Meeting 2009
Organizer: New Zealand Society of Gastroenterology
Location: Wellington, New Zealand
www.gastro2009.co.nz

21-25 November 2009
Gastro 2009 (UEGW + WCOG)
Organizers:
The United European Gastroenterology Federation (UEGF)
World Gastroenterology Organization (WGO)
World Organisation of Digestive Endoscopy (OMED)
British Society of Gastroenterology (BSG)
Location: London, United Kingdom
www.gastro2009.org

14-15 December 2009
Amsterdam Live Endoscopy
Organizer: World Organisation of Digestive Endoscopy
Location: Amsterdam, The Netherlands
www.amsterdamendoscopy.com