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Message from Dr. W.M. Hui, President

The Society has been pursuing its principles of promoting academic activities and advocating research advancement. In recent years, the Society was active in enhancing collaboration of expertise with other countries through holding a number of major international conferences in Hong Kong like 11th Asian Pacific Congress of Gastroenterology and 8th Asian Pacific Congress of Digestive Endoscopy, March 10-14, 2000. Besides, the Research Committee has decided to carry out its first research on "colorectal cancer", having noted that the "incidence" of colorectal cancer is increasing in Hong Kong. To encourage members to receive further training, the Society has launched scholarship scheme, the Scholarship 1999/2000 has been awarded to Dr. On-on Chan and Dr. Chi-man Leung. Foreseeing the future development of the Society, we have set up an office recently. I believe with this permanent office, the Society will become more well-structured and will extend its role as not only being a Hong Kong local academic organisation, but a regional one.

SCIENTIFIC UPDATES

Dr. Henry Lik-yuen Chan MBChB (CUHK), MRCP (UK)

Position	Medical Officer, Department of Medicine & Therapeutics, Prince of Wales Hospital
Training	Fellow of Gastroenterology and Hepatology, Department of Medicine & Therapeutics, PWH Research fellow in Hepatology (1997/98), Division of Gastroenterology, Department of Medicine, University of Michigan Medical Center (supported by fellowship of Hong Kong Association for the Study of Liver Diseases)
Research Interest	Natural history and molecular biology of hepatitis B virus infection, Treatment of hepatitis B virus infection, Peptic ulcer disease, gastrointestinal bleeding, NSAIDS and Helicobacter pylori



TREATMENT OF CHRONIC HEPATITIS B VIRUS (HBV) INFECTION - AN UPDATE

While the primary goals for the treatment of chronic HBV infection are to suppress viral replication and to induce disease remission, the ultimate goals are to prevent the hazardous complications of liver cirrhosis and hepatocellular carcinoma (HCC) and hence to improve survival. Interferon-alfa has been the first registered treatment since early 90s for chronic HBV infection. Although it has proven values in inducing disease remission as well as preventing progression into cirrhosis and HCC, its use is limited by its low treatment efficacy, inconvenient route of administration, high drug cost and potential dose-limiting adverse effects. The use of nucleoside and nucleotide analogues that inhibit reverse transcription and DNA polymerization of HBV replication have been evaluated in recent years. In addition to their potent anti-viral activities, they have the advantages of being orally administered and lacking serious side effects. In fact, lamivudine has been registered in Hong Kong in December 1998 and also recently approved by FDA in the United States.

In a recent Asian multi-centered phase III study, lamivudine 100mg daily has been shown to be effective in the treatment of chronic HBV infected patients with positive HBeAg and high viraemia (1). Lamivudine has very potent anti-viral activity with a median reduction of HBV DNA by 97% after 2 weeks of treatment. At 1 and 2 years post-treatment, HBeAg seroconversion occurred in 16% and 27% of patients, and sustained normalization of transaminase in 72% and 50%, respectively. One-year results confirmed histologic improvement in terms of Knodell necroinflammatory and fibrosis scores in patient receiving lamivudine versus those on placebo treatment, and 57% of patients on lamivudine had sustained undetectable HBV DNA by bDNA assay (Chiron) at the end of two years. A recent report from Mediterranean area suggests that lamivudine is also useful in suppressing viral replication in HBeAg negative patients with active hepatitis and viraemia (2). Another area of interest is the use of lamivudine in the treatment of decompensated liver cirrhosis and prevention of HBV recurrence post-liver transplantation, conditions where interferon is ineffective and contraindicated. Preliminary results have shown that lamivudine is

well tolerated and effective in inhibiting HBV replication and improving liver disease in these patients. In addition, lamivudine monotherapy started pre-transplant and continued post-transplant without concomitant hepatitis B immunoglobulin (HBIG) administration appears to reduce the rate of HBV reinfection in patients transplanted for HBV-related liver cirrhosis (3). It has the potential benefits of reducing the cost of HBIG immunoprophylaxis and the risk of HBV recurrence due to vaccine-escape mutants on long-term high dose HBIG therapy. All these enthusiastic results enable lamivudine to get launched in several countries including Hong Kong.

Famciclovir 500mg three times daily has also been shown to have effective anti-viral activity with little serious side effects in the treatment of chronic HBV infection as well as prophylaxis of HBV recurrence post-liver transplantation. However, its potency has been shown to be significantly lower than that of lamivudine; 2% and 8% versus 58% and 78% of patients achieved a >2 log fall in HBV DNA after 2 and 12 weeks of treatments respectively (4).

One problem of lamivudine and famciclovir is that their anti-viral effects wane off and viral replication relapses after the cessation of treatment. This may be related to the difficulty of eradicating the covalently closed circular (ccc) HBV DNA inside the hepatocytes and the slow turnover rate of hepatocytes. On the other hand, prolonged treatment with either drug leads to the emergence of drug resistant mutants and breakthrough of hepatitis. The famous lamivudine resistant mutant is at the YMDD motif of domain C at polymerase region of HBV genome. It starts to appear about 9 months post-treatment in chronic HBV carriers and even earlier in post-liver transplantation recipients, and the proportion of patients developing these mutants increases with time (5). Although the activity of hepatitis and viral replication associated with YMDD mutants is found to be lower than that of wild type HBV (6), it is still too early to comment on their long term clinical significance and their carcinogenic potential.

To solve the dilemma, one solution is to seek for a very potent anti-viral drug with little side effects, if one believes there would be no viral mutation if there were no viral replication. Lobucavir has been shown to have potent antiviral activity in short term studies, but further studies have been suspended because of carcinogenicity in animal studies. Adefovir dipivoxil, which has been shown to have higher anti-viral potency than lamivudine, has just gone through phase II studies. It still takes time before we can see its long-term efficacy. Another solution is to seek for combination cocktails. To combine an immunomodulatory drug with an anti-viral drug seem appealing, but the preliminary results of combining interferon-alfa and lamivudine did not show any significant advantage over lamivudine alone while patients receiving combination treatment have to tolerate the numerous side effects of interferon (7). Whether combining lamivudine with pegylated interferon which has a longer half-life than interferon-alfa or another immunomodulatory agent thymosin-alfa has any advantage over lamivudine alone still awaits further study. To combine two anti-viral drugs, the issue of cross-

resistance must be carefully examined. Although YMDD mutation is not found in patients treated by famciclovir, a mutation at domain B of the HBV polymerase genome, L528M, is commonly found in both famciclovir resistant mutants as well as associated with lamivudine resistant YMDD mutants. This potentially unfavors the coupling of lamivudine with famciclovir. The more attractive partner for lamivudine would be adefovir dipivoxil that has been shown to be effective against YMDD mutants by in vitro studies (8). However, the limitation of in vitro studies particularly the oversimplification of viral replication and mutations as well as the omission of host immune response must not be taken lightly. Other treatment options including immunomodulatory therapy such as interleukin-12, interleukin-2, T-cell vaccines and DNA vaccines as well as other novel therapies such as ribozymes, anti-sense oligonucleotide and dominant negative mutant are only in the early phases of research.

Where do we stand now? Lamivudine may not be the final answer to the treatment of chronic HBV infection, and more research is required to find a better anti-viral drug or an effective treatment combo. Lamivudine has no doubt given us a weapon to tackle HBV infection, particularly for active hepatitis with multiple flare-ups and high viraemia as well as for prophylaxis of HBV recurrence after liver transplantation. Some also suggested to use lamivudine in the treatment of fulminant HBV infection and early cirrhosis with significant viral activity as well as for prophylaxis of HBV relapses in HBsAg positive carriers undergoing transplantation other than liver transplantation or chemotherapy, but clinical evidence for these indications are still skinny. There is definitely some worry behind the increasing availability of lamivudine and its widespread use for chronic HBV carriers because of the mutant problem. The timing of stopping treatment and post-treatment flare is another area of concern. It still takes time before we can see the long-term clinical endpoints of anti-viral treatments such as progression to liver cirrhosis and HCC. The management of patients in the immune tolerance phase and the quiescent e-minus phase is not clear as few studies have specifically addressed on this issue and little success has been demonstrated in these patients with the current available treatments.

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SCIENTIFIC UPDATES

Aetiology of Functional Dyspepsia

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Functional dyspepsia (FD), also known as nonulcer dyspepsia, is an upper gastrointestinal symptom-complex which is diagnosed on the basis of its chronic or recurrent clinical course and most important of all, by excluding other noticeable organic disorders. Despite its high prevalence in developed countries, its aetiology and pathophysiology remain obscure at the moment. A number of suggestions and theories have been put forward trying to give insight into the pathophysiology of FD. However, none of them alone could help to explain the symptomatology in the majority of FD patients. Furthermore, there are problems in conducting well-designed studies to clarify these theories because of the obvious lack of an animal model in FD and the existence of a number of patient subgroups in FD among whom the aetiology might be different.

GASTRIC ACID

As the stomach seems to be the major organ that is responsible for the symptomatology of FD, it is natural to focus on gastric acid and to investigate whether it plays a role in the pathophysiology in FD (paralleling its role in the pathogenesis of peptic ulcer disease). The proposed mechanisms for gastric acid in symptom generation are either there is gastric acid hypersecretion in FD similar to what happens in duodenal ulcer patients or FD patients have increased sensitivity to normal acid secretion which is responsible for dyspeptic symptoms. Studies examined basal acid output and maximal acid output to pentagastrin found no difference between FD patients and normal controls. Further in-depth study did show *Helicobacter pylori* (*H. pylori*) positive FD patients have higher gastrin-releasing peptide stimulated acid output than *H. pylori* positive healthy controls¹. It seems a proportion of *H. pylori* positive FD patients have a disturbance in acid secretion similar to that of the duodenal ulcer patients and this may contribute to their dyspeptic symptoms. Studies using acid suppressive therapy indicate that acid is involved in the aetiology of symptom generation in about 20% of FD patients². Studies concentrating on the intragastric acid instillation for symptom reproduction are also consistent with a subgroup of FD patients being abnormally sensitive to acid. Most gastroenterologists believe that gastric acid is likely to be involved in the aetiology of FD but limited to a small subgroup of patients.

HELICOBACTER PYLORI

H. pylori is now known to be the main cause of gastritis and subjects who acquired acute infection either incidentally or intentionally did have dyspeptic symptoms. It was postulated that gastric infection with this pathogen led to FD. The question of whether this gastric inflammation can cause FD remains unanswered. Many putative mechanisms by which *H. pylori* infection could cause symptoms have been suggested. As a consequence of gastric mucosal inflammation, disordered motor function, altered visceral sensation and altered gastric acid secretion may occur. These factors have their implications in the pathophysiology of FD. Studies have been conducted to look for these possible gastric disturbances in *H. pylori* infected individuals with or without FD, in infected FD individuals before and after *H. pylori* eradication³. However, inconsistencies of results exist among studies. Studies about epidemiological link between this bacterium and FD, so far, did not show any significant association. Therapeutic trials focusing on symptomatology improvement after *H. pylori* eradication yield different conflicting results probably due to various study designs and the possible inclusion of peptic ulcer patients in remission^{4,5}. The controversy in the link between *H. pylori* infection and FD is still ongoing at present.

GASTROINTESTINAL AND BILIARY MOTOR ABNORMALITIES

Gastrointestinal motor abnormalities have a frequent occurrence in FD. Gastric motor dysfunction such as delayed gastric emptying demonstrated by antroduodenal manometry, electrogastrography and gastric emptying studies, has been reported in 25-60% of FD patients⁶. Biliary dyskinesia due to sphincter of Oddi dysfunction has been suggested to account for some of the dyspeptic symptoms in FD. Despite all these findings, these gastrointestinal and biliary abnormalities are rather non-specific and seem to be restricted to a proportion of FD patients. Furthermore, they do not necessarily have a temporal correlation to symptom perception by patients. Although prokinetic agents have been tried in FD with success in some reported series, these studies are criticized by inadequate sample size, short period of follow-up, inclusion of only certain FD subgroups including patients with possible gastro-oesophageal reflux disease⁷. The inter-relationship between symptoms in FD and digestive motor derangements currently remains unsettled. Recent reports suggest that gastrointestinal dysmotility is associated with perception of some dyspeptic symptoms in a subset of patients. In fact, well-conducted studies using appropriate and acceptable methodology are needed to verify whether gastrointestinal motor disorders play a causal role in FD.

VISCERAL HYPERSENSITIVITY

Recent research indicates that patients with functional gastrointestinal disorders such as irritable bowel syndrome and non-cardiac chest pain have an augmented perception of visceral pain, that is, visceral hypersensitivity. In some FD patients, visceral hypersensitivity of the gastroduodenal region to mechanical and chemical stimulations has been demonstrated. This may help to

explain the occurrence of post-prandial dyspeptic symptoms in some of the FD patients. Current evidence suggests an enhanced sensitivity of visceral afferent pathways with or without associated autonomic dysregulation appears to play an important role in the aetiology of symptoms in certain subgroup of FD patients⁸. The mechanism and aetiology of visceral hypersensitivity are still incompletely understood. An alternation in the interplay between vagal and spinal afferents, and the inadequate activation of antinociceptive systems in response to mechanical or chemical tissue irritation, may play a role in symptom generation.

PSYCHOSOCIAL FACTORS

The psychosomatic aspects of FD obviously cannot be ignored. FD patients are generally not found to differ from controls with regard to the frequency of stressful life events and distress scores. However, they did demonstrate an increased negative perception to major life events in one local study⁹. It is clear that psychosocial factors, particularly the presence of psychiatric co-morbidity, are strongly correlated with persistent dyspepsia. It is often not clear whether these factors are aetiological or co-morbid. It is possible that the dyspeptic complaint may be a symptom of the patient's psychiatric disorder. Psychosocial factors often appear to influence the perceived severity and the significance attached to gastrointestinal symptoms that occur in FD patients¹⁰.

CONCLUSIONS

Progress has been made in the past decade to reveal the underlying mechanisms that lead to the clinical condition of functional dyspepsia. Nevertheless, the lack of an effective treatment modality for FD currently is simply a reflection of our incomplete understanding of the aetiology and pathophysiology of this common condition. It is now apparent that FD is a syndrome with different disorder subgroups and different mechanisms may be responsible

for symptom generation in these subgroups. With a better clinical delineation of these FD subgroups, it is hope that future studies might give us more insight into the relationship between the mentioned aetiologies and these subgroups. Only with such knowledge, can newer therapeutic modalities be developed and individualized management plan be formulated.

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YOUNG CLINICIAN AWARDS FOR DDW THAILAND 1999

The American Gastroenterology Association together with The Gastroenterology Association of Thailand will hold an international meeting - "Digestive Disease Week Thailand 1999" in Chiang Mai, Thailand, December 1999, at which one of the important activities will be the "Young Clinician Awards" Program. Hong Kong Society of Gastroenterology is invited to propose candidates for the Awards. Those who are selected will be offered registration fees and accommodation for a period of 5 days during the meeting (Candidates will have to take care of their own round-trip airfare).

Criteria for considering a person to be a candidate for Young Clinician Award for DDW Thailand 1999 should be as follows:-

- Age at the date of the conference should not be more than 36 or born after November 12, 1963 A.C. or 2506 B.E.
- Must understand and able to communicate in English.
- Should (but no necessary) currently participate in research work.

- Preferably (but not necessary) with scientific publication and/ or abstracts and/or poster presentation (the more the better).
- Need not have completed fellowship training but must show constant interest in the above specialties.

Application

1. Interested parties should apply in writing enclosing the curriculum vitae (which should include personal data, professional qualifications, working experience, training experience in gastroenterology and publications).
2. Application should be sent together with supporting documents to Dr. Wai-mo Hui, President, Hong Kong Society of Gastroenterology c/o Miss Clare Wong, Department of Medicine, Queen Mary Hospital, Pokfulam Road, Hong Kong (Tel: 2855-3354, Fax: 2816-2863 and E-mail: mcwong@hkucc.hku.hk).
3. Deadline for application is August 30, 1999.

SCHOLARSHIP 1999/2000

The objective of the Scholarship is to facilitate trainees in gastroenterology to undertake overseas training in gastroenterology. The Society's Scholarship 1999/2000 has been granted to:

Dr. Chan has completed her basic physician training in the Department of Medicine, Queen Mary Hospital, and she is now on her way into higher physician training in Gastroenterology & Hepatology and Advanced Internal Medicine since July 1997. Dr. Chan will get clinical training in gastrointestinal oncology and participate in clinic and basic research in GI tumours and cancer genetics.



Dr. Ori-on Chan
Department of Medicine,
Queen Mary Hospital

Dr. Leung obtained his MBBS (HK) in 1993 and MRCP(UK) in 1997 and commenced his subspecialty training in Gastroenterology/Hepatology from 1998. He will get further his training in lower gastrointestinal diseases with particular emphasis on genetics of colorectal cancer and current management of inflammatory bowel diseases.



Dr. Chi-man Leung
Department of Medicine,
Pamela Youde Nethersole
Eastern Hospital

POSITION STATEMENT ON HELICOBACTER PYLORI

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Helicobacter pylori is a spiral shaped bacterium found in the mucus layer lining the stomach mucosa. It is the commonest chronic bacterial infection in humans, and is associated with peptic ulcer disease and a number of other conditions.

EPIDEMIOLOGY

Helicobacter pylori infects more than half of the population world-wide. Most individuals infected are asymptomatic. The incidence is lower in developed countries and there is an inverse relationship between prevalence and socioeconomic status. It is more prevalent in older adults. Transmission is probably from man to man via faecal-oral or oral-oral routes. It has been demonstrated that iatrogenic spread can occur through contaminated endoscopes.

DIAGNOSIS

Tests for *Helicobacter pylori* are divided into the invasive and non-invasive tests depending on whether endoscopy is required. The serological tests measure specific *H. pylori* antibodies. A number of such tests are available commercially, the sensitivity and specificity of which vary considerably. Local validation of the tests are desirable. Because the antibodies to *H. pylori* persist for a long time after *H. pylori* eradication, the serological tests are not recommended for documentation of success of *H. pylori* eradication.

Another non-invasive test is the urea breath test. The patient is given either ^{13}C or ^{14}C -labeled urea to drink. The urease produced by *H. pylori* will metabolize the urea rapidly to ammonia and carbon dioxide which will be absorbed and then exhaled. The amount of labeled carbon in the expired air will be able to determine whether *H. pylori* is present. It is a very accurate method but is relatively expensive. It is a reliable

method to assess the *Helicobacter pylori* status after treatment.

The invasive tests require upper endoscopy and biopsy of the gastric mucosa. Histological identification of *H. pylori* has long been considered the gold standard of diagnostic tests. However, it is time consuming and expensive. Histology is generally unnecessary in patients in whom a biopsy urease test is positive. The biopsy urease test is a colorimetric test based on the urease-producing ability of *H. pylori*. It is quick and accurate. When upper endoscopy is indicated, it is the test of first choice. Culture of biopsy specimens for *H. pylori* requires an experienced laboratory and is both time-consuming and expensive. It is only indicated when antimicrobial sensitivity testing is required.

HELICOBACTER PYLORI RELATED DISEASES PEPTIC ULCER DISEASE

Current scientific evidence points to a strong association between *Helicobacter pylori* and peptic ulcer disease. Cure of the infection results in a marked reduction in ulcer recurrence. Permanent cure of the peptic ulcer can be achieved. Therefore it is recommended that all gastric and duodenal ulcer patients who are infected with *Helicobacter pylori* should be given eradication therapy whether the ulcer is active or in remission. This also applies to patients with a history of ulcer bleeding or perforation. In complicated peptic ulcer disease, eradication of *H. pylori* should be confirmed. If available, the urea breath test is the ideal test to demonstrate *H. pylori* eradication.

NON-ULCER DYSPEPSIA

The relationship of non-ulcer dyspepsia to *H. Pylori* is unclear. Controlled trials do not show significant improvement of symptoms after *H. pylori* eradication. However, a review of 10 eradication studies found symptom improvement in 73% of the patients that became *H. pylori*-negative and 45% in patients that remained *H. pylori*-positive. It is probably advisable to eradicate *H. pylori* in patients with functional dyspepsia after

full investigation, but the strength of evidence is equivocal.

GASTRIC CARCINOMA

H. pylori plays a role in the pathogenesis of gastric carcinoma. However, eradication therapy for the purpose of preventing gastric carcinoma cannot be recommended at present. A Japanese study showed that patients treated for H. pylori after endoscopic resection of early gastric cancer had no recurrence of cancer while patients not treated had a recurrence rate of 9%. Basing on that evidence, it is recommended that H. pylori eradication should be given to patients following resection of early gastric cancer.

MUCOSA-ASSOCIATED LYMPHOID TISSUE LYMPHOMA (MALTOMA)

There is strong evidence to implicate H. pylori in the pathogenesis of gastric maltoma. Some studies show partial or complete regression of low-grade maltomas after H. pylori eradication though these studies are small and uncontrolled. It is recommended that H. pylori eradication therapy be given to patients with low-grade maltomas. However, the patients would require careful staging procedures and regular follow-up in specialized centres. Additional treatment modalities may be required.

GASTRO-OESOPHAGEAL REFLUX DISEASE

H. pylori does not have a role in the pathogenesis of gastro-oesophageal reflux disease. Eradication of H. pylori may in fact increase the incidence and severity of gastro-oesophageal reflux disease. On the other hand, long-term PPI treatment of gastro-oesophageal reflux disease may promote the development of atrophic gastritis in patients with H. pylori infection and H. pylori eradication may therefore be beneficial. More studies are needed in this area before firm recommendations could be made.

LONG TERM NSAID THERAPY

Routine testing for H. pylori prior to initiating treatment with NSAIDs is impractical because NSAIDs are so commonly used. NSAIDs and H. pylori are independent risk factors, possibly additive, for the development of peptic ulcers. Several studies have shown that H. pylori does not exacerbate NSAID-associated injury. In fact, ulcer healing in NSAID users using anti-secretory agents may be quicker in those who have H. pylori infection. Recent studies have suggested that elimination of H. pylori before NSAID treatment reduces ulcer occurrence. NSAIDs are also known to increase the risk of complication from a pre-existing ulcer, such as those due to H. pylori infection. It is recommended that patients with a past history of peptic ulcer disease should be tested for H. pylori and given H. pylori eradication therapy if positive.

TREATMENT REGIMENS

Effective treatment regimens should attain eradication rates

of over 90% per protocol and over 80% by intent-to-treat basis. These regimens include 7 days courses of :-

- (1) PPI in standard dose + clarithromycin 500mg + amoxicillin 1gm, each given twice daily
- (2) PPI in standard dose + clarithromycin 500mg + metronidazole 400mg, each given twice daily
- (3) Ranitidine bismuth citrate (RBC) 400mg + clarithromycin 500mg + amoxicillin 1gm, each given twice daily
- (4) Ranitidine bismuth citrate (RBC) 400mg + clarithromycin 500mg + metronidazole 400mg each given twice daily

The standard doses of PPI are : omeprazole 20mg, lansoprazole 30mg and pantoprazole 40mg. Metronidazole resistance is a rising problem adversely affecting the outcome of metronidazole containing regimens. If the local metronidazole resistance exceeds 30%, amoxicillin containing regimens are preferred to those containing metronidazole.

The classical triple therapy with colloidal bismuth subcitrate 120mg qid + metronidazole 400mg bd + tetracycline 500mg qid, is effective but requires to be given for 2 weeks.

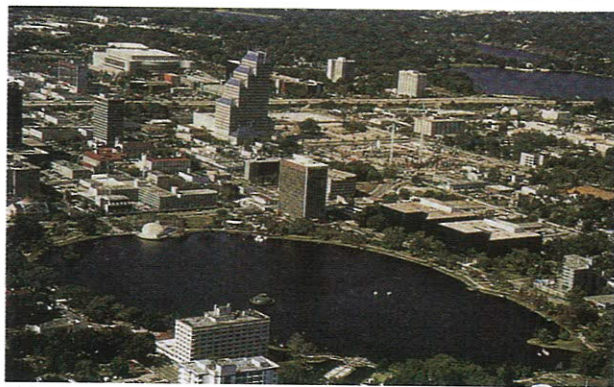
Dual therapy (PPI or RBC + amoxicillin or clarithromycin) is less effective than the triple therapy regimens.

For treatment failure with PPI triple therapy or RBC triple therapy, an effective regimen which can be tried is the quadruple therapy with the addition of PPI to the classical bismuth triple given in 1 week. Re-infection after successful eradication is uncommon in adults though it may be higher in children.

FURTHER READING

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REPORT AND SCIENTIFIC HIGHLIGHTS AT THE DIGESTIVE DISEASE WEEK (DDW) MAY 16-19, 1999, ORLANDO, FLORIDA, USA



Orlando

Dr. Yiu-wing Luk

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In an era of preventive medicine, health promotion and cost containment, it was to be expected that there would be many exciting reports and information addressing these fields in this year's DDW. In fact, the scope of this year's meeting had become even broader to include symposia and fora concerning the issues of clinical nutrition and treatment of morbid obesity.

COLORECTAL CANCER SCREENING

The ability to identify a benign precursor of cancer, remove it without disturbing the function of the organ, and essentially completely prevent mortality from cancer is truly unique. Colorectal cancer is one such ideal model. There were altogether 51 abstracts on cancer screening and among them, 21 were focused on colon cancer screening. Despite the recommendation made by the American Cancer Society that colon cancer screening should be performed in general population beginning at the age of 50 by fecal occult blood test and flexible sigmoidoscopy, screening colonoscopy is advocated by some gastroenterologists as mentioned by Bernard Levin in his state of the art presentation titled "Primary Prevention of Colorectal Cancer". This view is further supported by the US VA Cooperative Study Group with their preliminary results from the US VA colonoscopy screening trial. More than 3000 asymptomatic individuals with age 50-70 years were screened with colonoscopy. Serious pathology namely, invasive cancer, intramucosal carcinoma as well as polyps with high-grade dysplasia were found in 2.57% of these individuals. Lesions were situated in regions proximal to splenic flexure in 27.5% (sites inaccessible with flexible sigmoidoscopy). More importantly, 54.6% of these proximal lesions were without concomitant left-sided lesions. Screening colonoscopy is shown to be feasible and can detect patients with early serious neoplasia. Satisfactory performance of colonoscopy is an essential element of this trial as indicated by the total colonoscopy to caecal intubation was upto 97.5% and no serious complication especially perforation was reported. Reports from Netherlands and Northern Ireland that further supports the visualization of the whole colon

should be done for colorectal cancer screening, as they found that there was a significant proximal shift in the distribution of colon cancer over the past two decades. This implies using flexible sigmoidoscopy as a screening tool might not be the optimal method for such cancer screening. Some of the novel methods for colon cancer screening being discussed in this meeting include either CT- or MR-based virtual colonoscopy although this method might still miss the small (< 5mm) or flat lesions and the relatively high false-positive rate in cases of unsatisfactory bowel preparation, with the available technology at this moment. Other reported novel means include serum insulin-like growth factor (IGF)-II which was significantly elevated in individuals with adenomatous polyps, assay of altered DNA exfoliated into stool from cancers and large adenomas, these may represent some of the potential tools in colon cancer screening in future.

HELICOBACTER PYLORI AND GASTROESOPHAGEAL REFLUX DISEASE

There is controversy about the higher risk of developing gastroesophageal reflux disease (GERD) after *Helicobacter pylori* (*H. pylori*) eradication since the publication by Labenz et al 2 year ago. Axon from Leeds, UK performed *H. pylori* eradication in those symptomatic GERD patients with endoscopy proven mild esophagitis who were *H. pylori* positive, compared with the group without *H. pylori* eradication and a group of *H. pylori* negative symptomatic patients, they were all given a 8-week course of omeprazole for the healing of esophagitis. Without any maintenance anti-secretory therapy for these groups, the 12-month symptomatic relapse rate was similar in all 3 groups of around 80%. This result indicated that eradication of *H. pylori* did not have a deleterious effect on reflux symptoms which might imply that *H. pylori* has little or no influence on GERD. On the contrary, a study from Greece showed that non-GERD patients after successful *H. pylori* eradication and without anti-secretory maintenance treatment developed GERD in a significant higher proportion than the others who received anti-secretory treatment. Certainly, more data are really needed before this controversial issue can be made clear.

PORTAL HYPERTENSION

Transjugular intrahepatic portosystemic stent shunt (TIPS) is being increasingly used for the treatment of refractory complications of portal hypertension, however, limited data on the long term outcome are available. University of Heidelberg group of Germany has vast experience on TIPS and they reported the long term outcome in their 7 year prospective trial of 201 consecutive patients with recurrent variceal hemorrhage treated with TIPS from 1991 to 1998. The median follow up period was 2.3 years. TIPS was successfully completed in 98% of patients. Major complications occurred in 15% including 2 procedure-related deaths. The variceal rebleeding rate after 6 years was 29%. Hepatic encephalopathy occurred in 34% and was related to Child class. Rate of shunt stenosis or occlusion

after 6 years was 85% and also related to Child class. Total cumulative survival free of transplantation was 67% and survival in Child class C patients was 34.6%. They concluded that for those with preserved liver function, shunt patency remained an unresolved problem. There was an expected high mortality rate for those with Child C cirrhosis and they were at high risk for encephalopathy even though they were surviving. As a matter of fact, in advanced cirrhosis, TIPS primarily should be performed in patients who are candidates for liver transplantation.

INFLAMMATORY BOWEL DISEASE

Future treatment of refractory inflammatory bowel disease especially Crohn's disease (CD) is upgraded by the advent in biologic and specific cytokine therapy. Los Angeles group reported their experience in an open-labeled, stepwise dose escalating, 12-week pilot study to evaluate the safety, tolerance and efficacy of low-dose oral thalidomide (50-100mg/day) in the treatment of 12 patients with moderate to severe chronically-active steroid dependent CD. There was a consistent improvement in CD activity and the treatment was well tolerated and appeared to be safe. Another report from the University of Chicago also showed oral thalidomide at the dose of 200-300mg/day was useful in 8 out of 10 patients with refractory CD with perianal disease treated for 12 weeks. Other reported novel agents which showed a promising preliminary results include recombinant human interleukin eleven (rhIL-11) in CD not on

steroid from an US multicentered trial and recombinant human interleukin-10 (rhIL-10) in subjects with CD after first ileal or ileocolonic resection from a French study. Obviously, larger randomized, placebo-controlled, dose ranging trials are warranted before the above-mentioned agents can be implemented into clinical use.

OBESITY

Surgical treatment of morbid obesity is another hot topic in this year's DDW. MacLean et al from Montreal, Canada, reported their series of late outcome of isolated gastric bypass as the primary procedure for morbid obesity in 244 patients being followed for a mean of 5.5 years (range 3-8.4 years). An excellent late mean outcome was shown but there was significant variation among patients. There was no protein-calorie malnutrition noted. Brolin et al from New Jersey, US, reported their group of 91 patients undergoing gastric bariatric operations for morbid obesity who were followed for a mean of 4 years. They showed that the pre-existing abnormal lipid profiles can be permanently improved after gastric bariatric operations. The Pittsburgh group reported their series of 30 super-obese patients (BMI > 50) underwent laparoscopic Roux-en-Y gastric bypass. They showed that laparoscopic route was feasible in these despite major technical challenges. Results were encouraging with shorter hospital stays and rapid recovery despite a relatively longer operation time.

MAJOR MEETINGS

Gastro 99 - 26th Pan American Congress of Digestive Diseases & 13th Pan American Congress of Digestive Endoscopy

Vancouver, Canada August 28 - September 2, 1999

For further information, please contact:-

Gastro99 Congress Secretariat
c/o Chateau Travel, 759 Victoria Square, Suite 105
Montreal, PQ, Canada H2Y 2J7
Tel: (514) 288-9889 Fax: (514) 288-1123
Email: gastro99@odyssee.net
URL: <http://www.cag.ucalgary.ca>

Australian Gastroenterology Week

Sydney, Australia September 13-17, 1999

For further information, please contact:-

Dr. P. Scally
Mater Hospital South Brisbane Australia, 4101.
Tel: 61 7 38408755 Fax: 61 7 3840 1850
E-mail: P.Scally@mailbox.uq.edu.au

3rd International Meeting on Therapy in Liver Diseases

Barcelona, Spain September 22-24, 1999

For further information, please contact:-

Organizing Secretariat:
Mr. Luis Miciences OASIS, Travel and Congresses
Sor Angela de la Cruz, 8-28020 Madrid, Spain
Tel: (34) 91 555 11 19; fax: (34) 91 555 35 81
Email: 106047.14@compuserve.com

United European Gastroenterology Week

Rome, Italy November 13 - 17, 1999

For further information, please contact:-

Scientific Secretariat

M. Crespi Istituto "Regina Elena" Viale Regina Elena 291

I-00161 Rome, Italy
Tel: 39-06-4452 872 Fax: 39-06-49385147
E-mail: roma99chair@uni.net

Congress Organisers

Viale Tiziano, 19 I-00196 Rome, Italy
Tel: 39-06-328121 Fax: 39-06-3240143
E-mail: ega_uegw99@uni.net

14th International Workshop on Therapeutic Endoscopy

Endoscopy Centre, Princes of Wales Hospital, December 7-9, 1999

For further information, please contact:-

Tel: 2632 2233 Fax: 2635 0075 E-mail: info@hksde.org

5th AGA Digestive Disease Week 43rd Annual Gastroenterological Association of Thailand Conference

Chiang Mai December 12-16, 1999

For further information, please contact:-

5th Asia Pacific AGA Conference Division of Gastroenterology
Department of Medicine Siriraj Hospital, Pran-nok Bangkok-Noi,
Bangkok 10700, Thailand
Tel: +662 419 7281 Fax: +662 412 0586
URL: www.thaigastro.org

12th International Symposium on Endoscopic Ultrasonography

Monte Carlo, Monaco February 11-13, 2000

For further information, please contact:-

SOCFI EUS 2000 14 rue Mandarr- 75002 Paris, France
fournier@socfi.fr

APASL Commemorative International Congress on Viral Hepatitis, Prevention and Control

Singapore February 16-19, 2000

For further information, please contact:-

The Secretariat
International Hepatitis Congress - 2000
c/o Academy of Medicine, Singapore 16 College Road #01-01
College of Medicine Building Singapore 169854
Tel: (65) 223 8968 Fax: (65) 225 5155

11th Asian Pacific Congress of Gastroenterology & 8th Asian Pacific Congress of Digestive Endoscopy

Hong Kong March 10-14, 2000

For further information, please contact:-

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c/o Orient Dynamic Company Limited
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Kowloon, Hong Kong
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E-mail: onh@netvigator.com

Digestive Disease Week ASGE Annual Meeting

San Diego, CA, USA May 21-24, 2000

For further information:-

ASGE 5671 Peachtree Dunwoody Rd, Atlanta, Georgia 30342

World Congress of Pediatric Gastroenterology and Hepatology and Nutrition

Boston, MA, USA August 5-9, 2000

For further information, please contact:-

E-mail: naspgn@slackline.com

Australian Gastroenterology Week

October 9-13, 2000 Melbourne, Australia

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