A SELECTION OF TEN CURRENT READINGS ON TOPICS RELATED TO GASTROINTESTINAL DISEASES AVAILABLE AS FREE FULL-TEXT

Selection of readings made by A/Prof Goh Lee Gan

Reading 1 - GASTROESOPHAGEAL REFLUX DISEASE

Flook N, Jones R, Vakil N.Approach to gastroesophageal reflux disease in primary care: Putting the Montreal definition into practice. Can Fam Physician. 2008 May;54(5):701-5.

URL: http://www.cfp.ca/cgi/reprint/54/5/701 (free full text)

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ABSTRACT

OBJECTIVE: To apply the recently published Montreal definition of gastroesophageal reflux disease (GERD) in primary care.

SOURCES OF INFORMATION: The Montreal definition of GERD was developed by an international consensus group of experts in GERD and primary care physicians using rigorous evidence-based methods along with modern consensus development techniques and a patient-centred approach.

MAIN MESSAGE: Gastroesophageal reflux disease can be diagnosed in primarycare based on symptoms alone without additional diagnostic testing. Symptoms reach a threshold where they constitute disease when they are troublesome (cause difficulty) to patients. In addition to the cardinal symptoms of heartburn and regurgitation, people with GERD can also have sleep disturbances, chest pains, or respiratory symptoms. Monitoring patients' response to proton pump inhibitor therapy can confirm the success of management. Treatment for symptoms of GERD can also heal underlying reflux esophagitis if it is present.

CONCLUSION: Primary care physicians can diagnose and manage GERD confidently in most patients by investigating and treating troublesome symptoms without the need for additional investigations or referral to specialists. (PMID: 18474703 [PubMed - indexed for MEDLINE] PMCID: PMC2377200).

Reading 2 - PROTON PUMP INHIBITORS IN CIRRHOSIS

Lodato F, Azzaroli F, Di Girolamo M, Feletti V, Cecinato P, Lisotti A, Festi D, Roda E, Mazzella G. Proton pump inhibitors in cirrhosis: tradition or evidence based practice? World J Gastroenterol. 2008 May 21;14(19):2980-5.

URL: http://www.wjgnet.com/1007-9327/14/2980.pdf (free full text)

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ABSTRACT

Proton pump inhibitors (PPI) are very effective in inhibiting acid secretion and are extensively used in many acid related diseases. They are also often used in patients with cirrhosis sometimes in the absence of a specific acid related

disease, with the aim of preventing peptic complications in patients with variceal or hypertensive gastropathic bleeding receiving multidrug treatment. Contradicting reports support their use in cirrhosis and evidence of their efficacy in this condition is poor. Moreover there are convincing papers suggesting that acid secretion is reduced in patients with liver cirrhosis. With regard to *Helicobacter pylori* (*H.pylori*) infection, its prevalence in patients with cirrhosis is largely variable among different studies, and it seems that *H.pylori* eradication does not prevent gastro-duodenal ulcer formation and bleeding. With regard to the prevention and treatment of oesophageal complications after banding or sclerotherapy of oesophageal varices, there is little evidence for a protective role of PPI. Moreover, due to liver metabolism of PPI, the dose of most available PPIs should be reduced in cirrhotics. In conclusion, the use of this class of drugs seems more habit related than evidence-based eventually leading to an increase in health costs. PMID: 18494046 [PubMed - indexed for MEDLINE]

Reading 3 - ENDOSCOPIC ULTRASOUND FOR TMN STAGING OF GASTRIC CANCER

Puli SR, Batapati Krishna Reddy J, Bechtold ML, Antillon MR, Ibdah JA. How good is endoscopic ultrasound for TNM staging of gastric cancers? A meta-analysis and systematic review. World J Gastroenterol. 2008 Jul 7;14(25):4011-9.

URL: http://www.wjgnet.com/1007-9327/14/4011.pdf (free full text)

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ABSTRACT

AIM: To evaluate the accuracy of endoscopic ultrasound (EUS) for staging of gastric cancers.

METHODS: Only EUS studies confirmed by surgery were selected. Only studies from which a 2 x 2 table could be constructed for true positive, false negative, false positive and true negative values were included. Articles were searched in Medline, Pubmed, Ovid journals, Cumulative index for nursing and allied health literature, International pharmaceutical abstracts, old Medline, Medline nonindexed citations, and Cochrane control trial registry. Two reviewers independently searched and extracted data. The differences were resolved by mutual agreement. 2 x 2 tables were constructed with the data extracted from each study. Meta-analysis for the accuracy of EUS was analyzed by calculating pooled estimates of sensitivity, specificity, likelihood ratios, and diagnostic odds ratio. Pooling was conducted by both the Mantel-Haenszel method (fixed effects model) and DerSimonian Laird method (random effects model). The heterogeneity of studies was tested using Cochran's Q test based upon inverse variance weights.

RESULTS: Initial search identified 1620 reference articles and of these, 376 relevant articles were selected and reviewed. Twenty-two studies (n=1896) which met the inclusion criteria were included in this analysis. Pooled sensitivity of T1 was 88.1% (95% CI: 84.5-91.1) and T2 was 82.3% (95% CI: 78.2-86.0). For T3, pooled sensitivity was 89.7% (95% CI: 87.1-92.0). T4 had a pooled sensitivity of 99.2% (95% CI: 97.1-99.9). For nodal staging, the pooled sensitivity for N1 was 58.2% (95% CI: 53.5-62.8) and N2 was 64.9% (95% CI: 60.8-68.8). Pooled sensitivity to diagnose distant metastasis was 73.2% (95% CI: 63.2-81.7). The P for chi-squared heterogeneity for all the pooled accuracy estimates was >0.10.

CONCLUSION: EUS results are more accurate with advanced disease than early disease. If EUS diagnoses advanced disease, such as T4 disease, the patient is 500 times more likely to have true anatomic stage of T4 disease. (PMID: 18609685 [PubMed - indexed for MEDLINE]).

Reading 4 - MANAGEMENT OF GASTRIC & GASTROESOPHAGEAL CANCERS

Moehler M, Lyros O, Gockel I, Galle PR, Lang H. Multidisciplinary management of gastric and gastroesophageal cancers. World J Gastroenterol. 2008 Jun 28;14(24):3773-80.

URL: http://www.wjgnet.com/1007-9327/14/3773.pdf (free full text)

ABSTRACT

Carcinomas of the stomach and gastroesophageal junction are among the five top leading cancer types worldwide. In spite of radical surgical R0 resections being the basis of cure of gastric cancer, surgery alone provides long-term survival in only 30% of patients with advanced International Union Against Cancer (UICC) stages in Western countries because of the high risk of recurrence and metachronous metastases. However, recent large phase-III studies improved the diagnostic and therapeutic options in gastric cancers, indicating a more multidisciplinary management of the disease. Multimodal strategies combining different neoadjuvant and/or adjuvant protocols have clearly improved the gastric cancer prognosis when combined with surgery with curative intention. In particular, the perioperative (neoadjuvant, adjuvant) chemotherapy is now a well-established new standard of care for advanced tumors. Adjuvant therapy alone should be carefully discussed after surgical resection, mainly in individual patients with large lymph node positive tumors when neoadjuvant therapy could not be done. The palliative treatment options have also been remarkably improved with new chemotherapeutic agents and will further be enhanced with targeted therapies such as different monoclonal antibodies. This article reviews the most relevant literature on the multidisciplinary management of gastric and gastroesophageal cancer, and discusses future strategies to improve locoregional failures. PMID: 18609699 [PubMed - indexed for MEDLINE]

Reading 5 - PROTON PUMP INHIBITORS AND GASTRIC POLYPOSIS

Freeman HJ. Proton pump inhibitors and an emerging epidemic of gastric fundic gland polyposis. World J Gastroenterol. 2008 Mar 7;14(9):1318-20.

URL: http://www.wjgnet.com/1007-9327/14/1318.pdf (free full text)

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ABSTRACT

Fundic gland polyps are now commonly recognized during endoscopy. These polyps are benign, often multiple and usually detected in the gastric body and fundus. In the past, these polyps were sometimes associated with familial adenomatous polyposis. In recent years, it has become evident that increasing numbers of these polyps are being detected during endoscopic studies, particularly in patients treated with proton pump inhibitors for prolonged periods. In some, dysplastic changes in these polyps have also been reported. Recent studies have suggested that there may be no increase in risk of colon cancer with long-term proton pump inhibitor therapy. While temporarily reassuring, ongoing vigilance, particularly in those genetically predisposed to colon cancer, is still warranted. (PMID: 18322941 [PubMed - indexed for MEDLINE]).

Reading 6 - GASTRIC CANCER SYMPTOMS AND OUTCOME

Maconi G, Manes G, Porro GB. Role of symptoms in diagnosis and outcome of gastric cancer. World J Gastroenterol. 2008 Feb 28;14(8):1149-55.

URL: http://www.wjgnet.com/1007-9327/14/1149.pdf (free full text)

ABSTRACT

Gastric cancer is one of the most common cancers and the second most common cause of cancer deaths worldwide. Apart from Japan, where screening programmes have resulted in early diagnosis in asymptomatic patients, in most countries the diagnosis of gastric cancers is invariably made on account on dyspeptic and alarm symptoms, which may also be of prognostic significance when reported by the patient at diagnosis. However, their use as selection criteria for endoscopy seems to be inconsistent since alarm symptoms are not sufficiently sensitive to detect malignancies. In fact, the overall prevalence of these symptoms in dyspeptic patients is high, while the prevalence of gastro-intestinal cancer is very low. Moreover, symptoms of early stage cancer may be indistinguishable from those of benign dyspepsia, while the presence of alarm symptoms may imply an advanced and often inoperable disease. The features of dyspeptic and alarm symptoms may reflect the pathology of the tumour and be of prognostic value in suggesting site, stage and aggressiveness of cancer. Alarm symptoms in gastric cancer are independently related to survival and an increased number, as well as specific alarm symptoms, are closely correlated to the risk of death. Dysphagia, weight loss and a palpable abdominal mass appear to be major independent prognostic factors in gastric cancer, while gastro-intestinal bleeding, vomiting and also duration of symptoms, do not seem to have a relevant prognostic impact on survival in gastric cancer. (PMID: 18300338 [PubMed - indexed for MEDLINE]).

Reading 7 - PHARMACOTHERAPY OF CHRONIC ANAL FISSURE

Medhi B, Rao RS, Prakash A, Prakash O, Kaman L, Pandhi P. Recent advances in the pharmacotherapy of chronic anal fissure: an update. Asian J Surg. 2008 Jul;31(3):154-63.

URL: http://ajws.elsevier.com/ajws_archive/20087313A4482.pdf (free full text)

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ABSTRACT

Surgical sphincterotomy reduces anal tone and sphincter spasm and promotes ulcer healing. Because the surgery is associated with the side effect of faecal incontinence, pharmacological agents to treat chronic anal fissure have been explored recently. Glyceryl trinitrate (GTN) ointment (0.2%) has an efficacy of up to 68% in healing chronic anal fissure, but it is associated with headache as the major and most common side effect. Though botulinum toxin injected into the anal sphincter healed over 80% of chronic anal fissures, it is more invasive and expensive than GTN therapy. Diltiazem ointment achieved healing of chronic anal fissure comparable to 0.2% GTN ointment but was associated with fewer side effects. Other drugs that have been tried are lidocaine, the alpha-adrenergic antagonist indoramin, and the potassium channel opener minoxidil. PMID: 18658016 [PubMed - indexed for MEDLINE].

Reading 8 - COLORECTAL CANCER AND ADENOMATOUS POLYPS

Levin B et al. Screening and surveillance for the early detection of colorectal cancer and adenomatous polyps, 2008: a joint guideline from the American Cancer Society, the US Multi-Society Task Force on Colorectal Cancer, and the American College of Radiology. CA Cancer J Clin. 2008 May-Jun;58(3):130-60. Epub 2008 Mar 5.

URL: http://caonline.amcancersoc.org/cgi/reprint/58/3/130 (free full text)

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ABSTRACT

In the United States, colorectal cancer (CRC) is the third most common cancer diagnosed among men and women and the second leading cause of death from cancer. CRC largely can be prevented by the detection and removal of adenomatous polyps, and survival is significantly better when CRC is diagnosed while still localized. In 2006 to 2007, the American Cancer Society, the US Multi Society Task Force on Colorectal Cancer, and the American College of Radiology came together to develop consensus guidelines for the detection of adenomatous polyps and CRC in asymptomatic average-risk adults. In this update of each organization's guidelines, screening tests are grouped into those that primarily detect cancer early and those that can detect cancer early and also can detect adenomatous polyps, thus providing a greater potential for prevention through polypectomy. When possible, clinicians should make patients aware of the full range of screening options, but at a minimum they should be prepared to offer patients a choice between a screening test that is effective at both early cancer detection and cancer prevention through the detection and removal of polyps and a screening test that primarily is effective at early cancer detection. It is the strong opinion of these 3 organizations that colon cancer prevention should be the primary goal of screening. (PMID: 18322143 [PubMed - indexed for MEDLINE]).

Reading 9 - CONSTIPATION TREATMENT

Foxx-Orenstein AE, McNally MA, Odunsi ST. Update on constipation: one treatment does not fit all. Cleve Clin J Med. 2008 Nov;75(11):813-24.

URL: http://www.ccjm.org/content/75/11/813.full.pdf+html (free full text)

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ABSTRACT

Constipation is a common clinical problem that can be difficult to manage. It has a variety of identifiable causes, but even idiopathic constipation has different possible mechanisms. Often, the key to improvement and patient satisfaction is to understand the mechanism and the patient. (PMID: 19068963 [PubMed - indexed for MEDLINE).

Reading 10 - TREATMENT OF IRRITABLE BOWEL SYNDROME

Hammerle CW, Surawicz CM.Updates on treatment of irritable bowel syndrome. World J Gastroenterol. 2008 May 7;14(17):2639-49.

URL: http://www.wjgnet.com/1007-9327/14/2639.pdf (free full text)

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ABSTRACT

Irritable bowel syndrome (IBS) is a highly prevalent gastrointestinal disorder characterized by abdominal pain and discomfort in association with altered bowel habits. It is estimated to affect 10%-15% of the Western population, and has a large impact on quality of life and (in)direct healthcare costs. IBS is a multifactorial disorder involving dysregulation within the brain-gut axis, and it is frequently associated with gastrointestinal motor and sensory dysfunction, enteric and central nervous system irregularities, neuroimmune dysregulation, and post-infectious inflammation. As with other functional medical disorders, the treatment for IBS can be challenging. Conventional therapy for those with moderate to severe symptoms is largely unsatisfactory, and the development of new and effective drugs is made difficult by the complex pathogenesis, variety of symptoms, and lack of objective clinical findings that are the hallmark of this disorder. Fortunately, research advances over the past several decades have provided insight into potential mechanisms responsible for the pathogenesis of IBS, and have led to the development of several promising pharmaceutical agents. In recent years there has been much publicity over several of these new IBS medications (alosetron and tegaserod) because of their reported association with ischemic colitis and cardiovascular disease. While these agents remain available for use under restricted prescribing programs, this highlights the need for continued development of safe and effective medication for IBS. This article provides a physiologically-based overview of recently developed and frequently employed pharmaceutical agents used to treat IBS, and discusses some non-pharmaceutical options that may be beneficial in this disorder. (PMID: 18461649 [PubMed - indexed for MEDLINE]).