

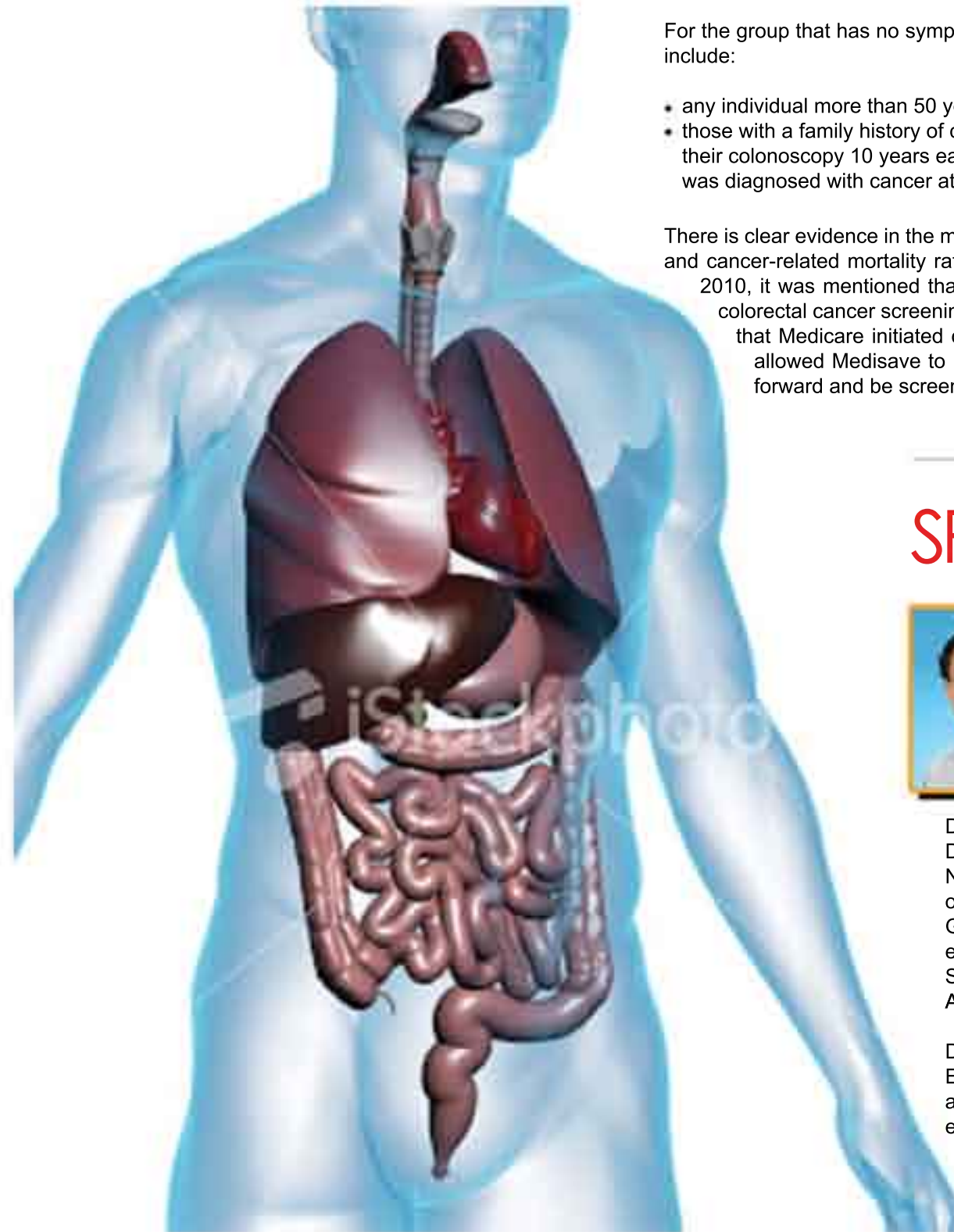
COLONOSCOPY - when do you **need** it?

By Dr Ho Choon Kiat

Besides modalities like Barium enema and CT Colography, Colonoscopy is but another method to evaluate the large intestine. However unlike the 2 previously mentioned modalities which are purely diagnostic, Colonoscopy is the only modality that has both diagnostic and therapeutic potential. During colonoscopy, the endoscopist will carefully advance the endoscope to the caecum so as to evaluate the entire length of the large bowel. If the clinical condition requires it, the endoscopist can even cannulate and examine the terminal ileum. The biggest advantage of a colonoscopy is the ability to perform additional procedures. This includes obtaining a tissue biopsy from suspicious lesions for a histological diagnosis. The endoscopist can also arrest bleeding. More importantly, the endoscopist can sometimes completely remove neoplastic lesions like polyps. Most colorectal cancers arise from small adenomatous polyps. With time, such polyps will grow and mutate into cancerous tumours. By removing such polyps before they turn cancerous, we can effectively prevent colorectal cancer. The problem with these polyps is that they tend to be asymptomatic. By the time patients present with symptoms, there is a chance that such polyps have already developed into cancer.

Hence patients who may require a colonoscopic evaluation fall into 2 broad groups. People in the first group are those who have no symptoms but are at risk of colorectal polyp or cancer. The second group will include those patients who complain of the following symptoms:

- change in their bowel habits
- frank bleeding per rectum. For such patients, they will need to be evaluated carefully before attributing the bleeding to haemorrhoids. Haemorrhoidal bleeding tends to be fresh. The blood may even drip down following defaecation. On the other hand, bleeding from neoplastic lesions tend to be darker red in colour, and may be mixed with the stools.
- occult bleeding per rectum. This group of patients are those who have a positive Faecal Occult Blood Test (FOBT). With the increasing use of the FOBT kit or the Faecal Immunochemical test (FIT) kit for colorectal cancer screening in Singapore, GPs can expect to see more of such patients.
- a reduction in the calibre of the stools
- tenesmus or the sensation of incomplete evacuation
- unexplained loss of appetite or loss of weight
- persistent or recurrent unexplained abdominal pain
- anaemia



For the group that has no symptoms, they are mainly people who have a higher risk of colorectal polyp or cancers. These include:

- any individual more than 50 years of age. This applies to both males and females.
- those with a family history of colorectal cancer, particularly in a first-degree relative. For such patients, they should have their colonoscopy 10 years earlier than the age their relative was diagnosed with colorectal cancer, e.g. if the relative was diagnosed with cancer at age 50, the patient should have the first colonoscopy at age 40.

There is clear evidence in the medical literature that colorectal cancer screening can reduce the incidence of colon cancer and cancer-related mortality rates. In a recent publication from the American National Institutes of Health (NIH) in Feb 2010, it was mentioned that since 2001, colonoscopy has emerged as the most widely used screening method for colorectal cancer screening in the United States. Besides its added therapeutic potential, a more plausible reason is that Medicare initiated coverage of screening colonoscopy since 2001. In Singapore, the Government has now allowed Medisave to be used to cover colonoscopy. It is hoped that with this initiative, more people will come forward and be screened. The take home message is that colorectal cancer screening saves lives.

SPOTLIGHT



Dr Ho Choon Kiat
Director, Endoscopy Centre
Consultant, Department of General Surgery
Tan Tock Seng Hospital

Dr Ho is a consultant surgeon with the Department of General Surgery and the Digestive Disease Center at Tan Tock Seng Hospital. He graduated from the medical school at the National University of Singapore in 1994, and was admitted as a Fellow to the Royal College of Surgeons of Edinburgh as well as the Royal College of Physicians and Surgeons of Glasgow in 1999. He was successful in the Joint Specialty Fellowship in General Surgery examination in 2003 and was certified a Specialist by the Specialist Accreditation Board of Singapore. He was subsequently admitted as a Fellow to the College of Surgeons, Academy of Medicine of Singapore.

Dr Ho has a special interest in endoscopy and is the current Director of the TTSH Endoscopy Centre. He hopes to increase the public's awareness of the role of endoscopy, and to facilitate the public's access to endoscopy through schemes like direct-access endoscopy and community based satellite endoscopy units.

GASTROSCOPY

By Dr Quan Wai Leong

- when do you **need** it?

One of the many challenges that many of us face in our daily clinical practice is GI related. In fact, other than respiratory conditions, GI related symptoms are arguably the most common complaints that we encounter in our office based practice. However, unlike chronic conditions such as diabetes and hypertension where there are figures and parameters to guide us in bedside diagnosis and management, gastrointestinal symptoms can be non-specific. As a result, vague terms such as "dyspepsia" and "colic" are commonly used in our daily practice to include bloating, pain, belching and early satiety experience by patients.

Among the many upper GI conditions, gastroesophageal reflux disease (GERD) is probably the best defined problem. Heartburn is the hallmark symptom of GERD. Although some patients may present with other manifestations include acid regurgitation and dysphagia, others may have atypical symptoms including angina-like pain or airway induced symptoms.

It is not uncommon for patients with chronic GERD to undergo an upper endoscopy to exclude oesophagitis and Barrett's oesophagus which has a small potential for malignant transformation. Data from the West has supported a one-off upper endoscopic examination for obese white male with chronic GERD to exclude Barrett's oesophagus. However, clinical evidence for such practice is lacking in our local context. In very severe or complicated cases, endoscopic therapy and surgery may be required as definitive treatment.

Dyspepsia is another common condition with an estimated prevalence of 25 to 50 percent in Western countries and approximately 15 to 30 percent in Asian countries including Korea and Singapore.

It can be defined as a symptom complex of epigastric pain or discomfort which originates in the upper GI tract. It consists of a constellation of heterogeneous symptoms that may or may not indicate identifiable upper GI disease. Such symptoms include bloating, early satiety and sensation of indigestion.

As dyspepsia is a clinical diagnosis based on symptoms, specific conditions, such as gastritis, peptic ulcer disease or duodenitis can only be diagnosed during endoscopy. In the absence of an identifiable lesion after an upper

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As dyspepsia is a clinical diagnosis based on symptoms, specific conditions, such as gastritis, peptic ulcer disease or duodenitis can only be diagnosed during endoscopy. In the absence of an identifiable lesion after an upper endoscopy, the patient is considered to have functional dyspepsia or non-ulcer dyspepsia.

To date, the most challenging aspect in managing dyspepsia is to identify those patients whom an upper endoscopy would make a difference in their management especially to exclude malignancy. It is recommended for patients with recent onset dyspepsia and one of the followings to undergo an upper endoscopic examination:

1. age > 35
2. unexplained weight loss
3. vomiting
4. dysphagia
5. anaemia/melaena
6. abdominal masses on examination

Recent data has suggested that majority of peptic ulcers are the result of long term medication such as aspirin or other NSAIDs and Helicobacter Pylori (HP) infection. Avoiding or eradicating these risk factors will reduce the ulcer relapse rate significantly. Post HP eradication can be confirmed via urea breath test (UBT) if there is no indication for a repeat upper endoscopy.

Therapy for dyspepsia is dependent on the actual diagnosis and the presence or absence of complications. Common treatment regimes include the use of acid suppression medicine such as H2-blockers or proton pump inhibitors. Antibiotics are also commonly prescribed for eradicating HP infection. For patients with non-ulcer dyspepsia, medicine that regulates gut motility or a low dose anti-depressant may be effective in reducing the discomfort.

The follow-up strategy for dyspepsia is again dependent on the final diagnosis. Repeat endoscopy may be needed for patients diagnosed with gastric ulcer disease to document healing and clearance of HP infection. Most patients with non-ulcer dyspepsia will be given therapy which is driven by symptoms with infrequent outpatient follow-up appointments.



SPOTLIGHT



Dr Quan Wai Leong
Deputy Director, Endoscopy Centre
Consultant, Department of Gastroenterology
Tan Tock Seng Hospital

Dr Quan is a consultant surgeon with the Department of Gastroenterology at Tan Tock Seng Hospital. His specializations include Endoscopic Retrograde and Cholangio-Pancreatography (ERCP). Dr Quan is also currently serving as Deputy Director of the TTSH Endoscopy Centre.