Assessing and managing a patient with Barrett's oesophagus

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Barrett's oesophagus is a major risk factor for oesophageal adenocarcinoma. It is recommended that patients with the condition take a regular proton pump inhibitor to control reflux symptoms and be offered endoscopic surveillance.

Remember

- Barrett's oesophagus is a condition in which the squamous mucosa of the distal oesophagus is replaced by columnar epithelium containing specialised intestinal metaplasia (Figure).
- The importance of Barrett's oesophagus is that nearly all oesophageal adenocarcinoma arises from Barrett's oesophagus.[1] The incidences of both oesophageal adenocarcinomas and Barrett's oesophagus have increased greatly in developed countries over the past three decades.[2-4]

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Assessment

- The primary risk factor for both Barrett's oesophagus and oesophageal adenocarcinoma is gastro-oesophageal reflux (GOR), and about 10 to 12% of patients with GOR symptoms have Barrett's oesophagus.[5,6] The risk of Barrett's oesophagus is increased 10- to 30-fold in patients with weekly reflux.[7,8]
- Abdominal obesity is also a significant risk factor, independent of GOR, for Barrett's oesophagus and oesophageal adenocarcinoma.[9-11]
- Barrett's oesophagus is twice as common in men than it is in women.[12] It is also more common in Caucasians and older patients, with a mean age at diagnosis of Barrett's oesophagus of 62 years.[8,13]
- Screening for Barrett's oesophagus in the general population is not recommended. The usefulness of screening in selective high-risk populations remains to be established. Current research aims to identify factors that may be used in risk-stratification for screening, thereby making Barrett's oesophagus screening cost-effective.[13,14]
- Diagnostic upper endoscopy should be performed in those patients with chronic GOR symptoms refractory to initial treatment or with 'alarm features' (dysphagia, recurrent vomiting, haematemesis, melaena, anaemia or weight loss).[14]

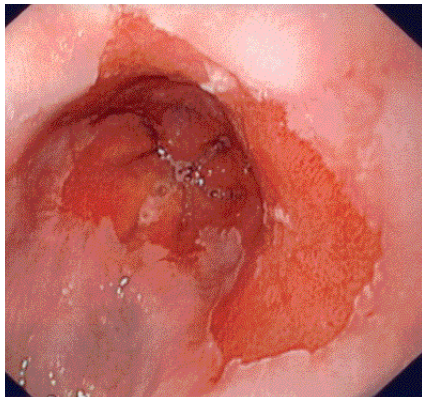

PHOTO COURTESY OF DR LUKE HOURIGAN, BRISBANE.

Figure. Endoscopic photograph of Barrett's oesophagus showing the oesophageal squamous epithelium replaced by tongues of columnar epithelium.

Management

- The incidence rate of oesophageal adenocarcinoma in patients with Barrett's oesophagus is about 0.4% per year, with no geographical variation between studies from the UK, Europe and the USA.[15] This risk is the basis for currently recommended endoscopic surveillance programs in those with Barrett's oesophagus, although the cost-effectiveness of these programs is controversial. The risk appears to be similar for long segment (greater than 3 cm length) and short segment (less than 3 cm length) Barrett's oesophagus.[15]
- Oesophageal adenocarcinoma usually develops within Barrett's oesophagus via a dysplasia–carcinoma sequence.
- If Barrett's oesophagus is identified at the time of endoscopy, multiple biopsies should be taken from the segment of Barrett's oesophagus to assess for dysplasia. Newer endoscopic techniques such as narrow band imaging and high-definition endoscopy may improve the detection of dysplasia within Barrett's oesophagus.[16]
- It is currently recommended that in those patients with an initial diagnosis of Barrett's oesophagus without dysplasia, a follow-up endoscopy be

continued

performed in one to two years and subsequently every two to three years if no dysplasia is found.[13,14]

- If low-grade dysplasia is identified within the Barrett's oesophagus, repeat endoscopy is recommended within six months and, if there is no progression of the dysplasia, repeated 12 months later. The risk of progression from low-grade dysplasia to oesophageal adenocarcinoma appears similar to the overall risk of oesophageal adenocarcinoma in Barrett's oesophagus.[17]
- In patients with high-grade dysplasia within the Barrett's oesophagus, oesophageal adenocarcinoma occurs at an incidence rate of about 6% per year.[18] In the past, an oesophagectomy was recommended in patients with high-grade dysplasia who were fit for surgery. Recently, several endoscopic ablative techniques have been developed for the treatment of high-grade dysplasia and superficial oesophageal adenocarcinoma limited to the mucosal layer of the oesophagus. Early results of these techniques are encouraging.[19]
- Decisions concerning the endoscopic or surgical treatment of high-grade dysplasia and superficial oesophageal adenocarcinoma depend on the individual circumstances of each case and are ideally made by a multidisciplinary team at a centre that has experience in managing these conditions.
- Endoscopic ablative therapy has no role in the management of invasive oesophageal adenocarcinoma.
- It is currently recommended that patients with Barrett's oesophagus be on a regular proton pump inhibitor to control GOR symptoms.[13,14] In patients with Barrett's oesophagus who remain symptomatic on standard or increased dose proton pump inhibitor treatment, endoscopy to ensure mucosal healing and use of pH monitoring to ensure adequate control of GOR may be required.[13]
- Currently, there are a number of studies looking at the role of proton pump inhibitors, aspirin and COX-2 inhibitors in the chemoprevention of oesophageal adenocarcinoma in Barrett's oesophagus.[20] MT

References

A list of references is available on request to the editorial office.

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