

# The management of upper gastrointestinal symptoms: is endoscopy indicated?

Anne E Duggan

Testing for *Helicobacter pylori*, and acid-suppression therapy are nearly always better strategies

Most patients with upper gastrointestinal symptoms can be effectively managed without investigation. Recent long-term follow-up of patients with upper gastrointestinal symptoms shows that most have a benign course.<sup>1,2</sup> A recent follow-up of 300 patients 9 years after investigations showed that 40% were asymptomatic; 70% of these without medication.<sup>2</sup> Such a good outcome is the result of the decline of *Helicobacter pylori*<sup>3</sup> (making peptic ulcer uncommon and gastric cancer rare in the absence of genetic or ethnic predisposition) and the easy availability of effective acid-suppression therapy (making gastro-oesophageal reflux disease easily treatable). For the vast majority of patients, upper gastrointestinal symptoms are now a disease, not a disease.

These changes in epidemiology and treatment simplify the management approach to upper gastrointestinal symptoms (Box). Gastroscopy now has a low diagnostic yield. A review of 22 studies investigating dyspepsia found that, overall, findings in 50% of gastroscopies were normal, 12% revealed reflux oesophagitis, 33% gastroduodenal ulceration, and 1.2% malignancy.<sup>5</sup> International management guidelines recommend two alternatives to gastroscopy:

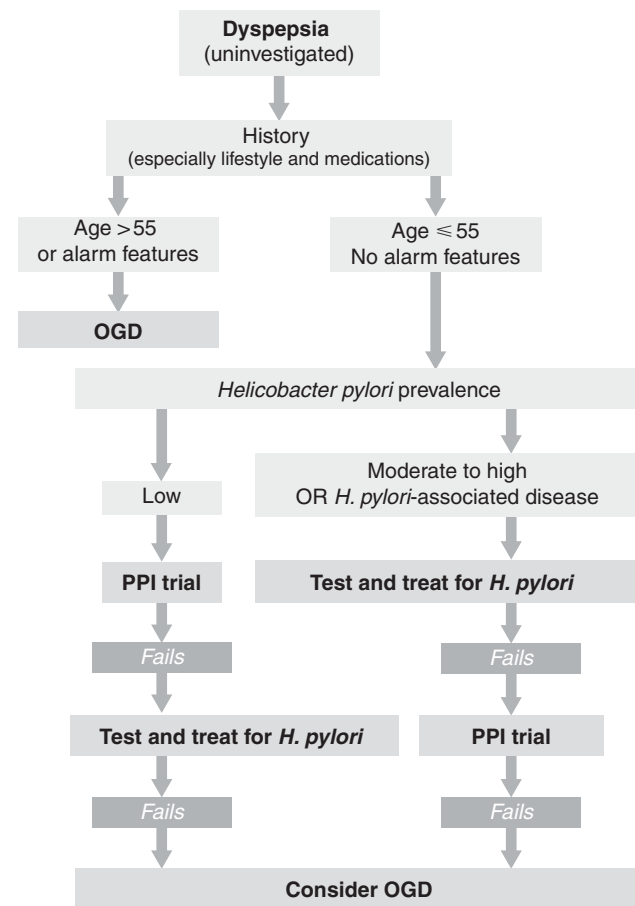
- empiric acid-suppression therapy; or
- *H. pylori* testing and treatment.<sup>4</sup>

Acid-suppression therapy is effective treatment for gastro-oesophageal reflux disease (GORD), and the “omeprazole test” (a simple trial of omeprazole [40 mg twice daily for a week]) diagnoses GORD more accurately than endoscopy, and with a sensitivity of around 80%.<sup>6</sup> For population groups with a high prevalence of *H. pylori* infection, such as the elderly and some ethnic groups, *H. pylori* testing and treatment has advantages. For younger patients, *H. pylori* infection is unlikely, as childhood domestic hygiene has improved.

If a test for *H. pylori* is positive, treatment provides:

- definitive treatment of peptic ulcer disease;
- no adverse outcome for non-ulcer disease;
- risk reduction for ulcer disease associated with non-steroidal anti-inflammatory drug (NSAID) treatment; and

## Algorithm for the management of uninvestigated dyspepsia\*



\* Adapted from Talley.<sup>4</sup>

OGD = Oesophago-gastro-duodenoscopy. PPI = Proton-pump inhibitor. ◆

- possible risk reduction for future *H. pylori*-associated gastric cancer.

For those who test negative for *H. pylori*, the test provides reassurance.

Population studies have shown that people who do and those who don't consult general practitioners for their upper gastrointestinal symptoms have similar symptom severity, suggesting that reasons for consultation may include anxiety about the significance of symptoms.<sup>7</sup> Patients should be asked why they present. For those who want information, data show that lifestyle contributes to GORD and adenocarcinoma development, in particular, obesity, smoking, poor fruit and vegetable intake and a sedentary lifestyle.<sup>8,9</sup> This information is a useful tool in encouraging patients with GORD to modify their risk and improve their overall health. Overly rapid prescription of acid-suppression therapy may waste opportunities for lifestyle modification.

*H. pylori* testing should be offered to those likely to be infected because of advanced age, ethnic background, or a past or family history of ulcer disease, and to those who take NSAIDs. After advice, and serological or urea breath testing and treatment of patients with a positive result, symptomatic patients can be offered empiric therapy. Whether this should be a step-up approach with initial antacids followed by H<sub>2</sub>-receptor antagonists, or a step-down approach with proton-pump inhibitors followed by H<sub>2</sub>-receptor antagonists remains controversial, as does on-demand versus ongoing treatment. Population data show that, after initial consultation, a substantial proportion of patients cease therapy or continue on an intermittent basis.<sup>2</sup> There are no data to indicate that for most patients this is harmful.

Non-responders often have non-ulcer or functional dyspepsia and treatment is unrewarding. Prescribed and complementary medications, a frequent cause, should be reviewed. Delayed gastric emptying affects up to 40% of non-ulcer dyspepsia patients and is particularly frequent in patients with long-standing diabetes. Previous gastroenteritis is a recently identified cause of non-ulcer dyspepsia. Prokinetic therapy (with drugs that increase the contractility of the smooth muscle of the upper gut, such as motilium) may benefit both groups.

Endoscopy should be reserved for those with a familial or ethnic risk of upper gastrointestinal cancer, older patients with alarm symptoms such as dysphagia, haematemesis or weight loss<sup>10</sup> and cancer-phobic patients, as its role in patient reassurance is small and not cost-effective compared with other strategies.<sup>11</sup> Concern about missing a cancer diagnosis should be tempered by awareness of its low incidence and the limited value of "alarm symptoms".<sup>5,10</sup> In 2001, there were 10 gastric cancers and fewer than six oesophageal cancers per 100 000 population reported in Australia.<sup>12</sup> A recent meta-analysis found alarm symptoms had sensitivity of 0–83% and specificity of 40%–98%, and a study of patients with newly diagnosed gastric cancer found poor correlation between symptoms and resectability with:

- 41% having symptoms;
- 81% of these having alarm symptoms;
- 12% of patients with early gastric cancer having prior symptoms; and
- no correlation between symptom duration and disease stage.<sup>10,13</sup>

In clinical practice, a third of people with upper gastrointestinal symptoms consult their GP within 6 months of symptom onset.<sup>2,6</sup> As oesophageal adenocarcinoma is associated with severe, long-

standing upper-gastrointestinal symptoms, "one-off" endoscopy is unlikely to improve early diagnosis.<sup>10,13</sup>

Today, most patients, particularly those aged under 55 years, can be reassured that:

- their symptoms are benign;
- organic disease, if present, is likely to be responsive to *H. pylori* eradication or acid-suppression therapy; and
- their lifetime risk of upper gastrointestinal cancer is exceedingly small and may best be reduced by primary prevention with lifestyle modification.

If the temptation to refer a patient for endoscopy persists, then the question is, is this to meet an unmet need or is an un-need being met?

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