10-minute consultation

Dyspepsia

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This is part of a series of occasional articles on common problems in primary care

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A man complains of recurrent epigastric pain, which he has had periodically for many years. He has been prescribed proton pump inhibitors several times, and he buys antacids over the counter at other times. He is fed up with pills and wants to know what is wrong.

What issues you should cover

- Is this really dyspepsia? Ask about epigastric pain; heartburn and acid regurgitation; attitudes towards meals; lying flat; and response to antacids. Consider biliary or cardiac pain. Predominant bloating may indicate aerophagia or the irritable bowel syndrome.
- Be alert to "alarm symptoms" (weight loss, anaemia, vomiting, jaundice, and epigastric mass); patients aged 55 and over with recent onset of symptoms; and continuous epigastric pain. These suggest Barrett's oesophagus, pernicious anaemia, atrophic gastritis, or upper gastrointestinal cancer.
- Ask about drug use. Non-steroidal anti-inflammatory drugs and aspirin commonly cause dyspepsia (steroids, theophyllines, and calcium antagonists are less common causes).
- Has the patient been investigated previously? Peptic ulcer disease and oesophagitis can recur, but a previously normal investigation may not exclude new disease.

What you should do

If possible, stop any medication likely to cause dyspepsia.

Patients with previous upper gastrointestinal investigation

- Consider that the cause may have recurred. Peptic ulcer disease should be treated by eradication of *Helicobacter pylori*; if this has been done previously, a breath test will be required to confirm success.

The BMJ welcomes contributions by general practitioners to this series

Summary of evidence of effectiveness of treatments for dyspepsia

Intervention	Number needed to treat* (95% confidence interval)
Peptic ulcer disease:	
<i>H. pylori</i> eradication v H_2 receptor antagonists	1.8 (1.6 to 2.1)
Non-ulcer dyspepsia:	
H_2 receptor antagonists v placebo	7 (5 to 40)
Proton pump inhibitors v placebo	17 (8 to ∞)†
<i>H. pylori</i> eradication v placebo	15 (10 to 31)
No reflux disease on endoscopy:	
Proton pump inhibitors v placebo	4 (3 to 5)
H_2 receptor antagonists v placebo	3 (2 to 6)
Proton pump inhibitors v H_2 receptor antagonists	8 (5 to 143)
Uninvestigated dyspepsia:	
H_2 receptor antagonists v antacid	12 (3 to ∞)†
Proton pump inhibitors v antacid	6 (5 to 8)
Proton pump inhibitors v H_2 receptor antagonists	5 (3 to 11)
Early endoscopy v acid suppression	9 (4 to ∞)†

*For cure of one patient at one year follow up, control event rate of 70% is assumed. The table should be interpreted as a summary of evidence and not a league table as indirect comparisons are not robust.

†Confidence interval crosses no effect.

Useful reading

Van Pinxteren B, Numans ME, Bonis PA, Lau J. Short-term treatment with proton pump inhibitors, H_2 -receptor antagonists and prokinetics for gastro-oesophageal reflux disease-like symptoms and endoscopy negative reflux disease. *Cochrane Database Syst Rev* 2000;(2):CD002095.

Soo S, Moayyedi P, Deeks J, Delaney B, Innes MA, Forman D. Pharmacological interventions for non-ulcer dyspepsia. *Cochrane Database Syst Rev* 2000;(2):CD001960.

Delaney BC, Innes MA, Deeks J, Wilson S, Oakes R, Moayyedi P, et al. Initial management strategies for dyspepsia. *Cochrane Database Syst Rev* 2000;(2):CD001961.

Moayyedi P, Soo S, Deeks J, Forman D, Mason J, Innes M, et al. A systematic review and economic evaluation of *Helicobacter pylori* eradication treatment for non-ulcer dyspepsia. *BMJ* 2000;321:659-64.

- Patients with recurrent gastro-oesophageal reflux disease, either alone or with oesophagitis, may need treatment with a proton pump inhibitor.
- Patients with predominant epigastric pain without peptic ulcer disease or oesophagitis have functional dyspepsia. One in 15 of these patients will respond to *H. pylori* eradication treatment. As dyspepsia recurs, even small effects such as this may be cost effective, but do not raise patients' expectations of cure.
- Proton pump inhibitors, H_2 receptor antagonists, and prokinetic agents have not been shown conclusively to benefit patients with functional dyspepsia; monitor individuals' responses carefully before regular prescribing.
- Consider further endoscopy on the basis of alarm symptoms, worsening symptoms in patients with risk factors for dyspepsia, or to allay anxiety.

Patients without previous investigation

- If alarm symptoms are present consider endoscopy to exclude possible upper gastrointestinal cancer.
- Empirical acid suppression is a reasonable first approach, but many patients will require either continuing or intermittent treatment.
- Endoscopy may reassure patients and their doctor that serious disease is not being missed, but it is expensive and may not help management.
- Non-invasive testing for *H. pylori* with either serology or a breath test, followed by eradication treatment, is more cost effective than endoscopy, but its cost effectiveness relative to acid suppression alone is unknown.