

# Peptic ulcer

Patients presenting with symptoms of peptic ulcer should receive symptomatic treatment and be offered explanation and reassurance.

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Urea breath test for *Helicobacter pylori*. The bacteria is the cause of 95% of duodenal ulcers in patients not taking NSAIDs MWMPC

**E**ach year, about 50 patients per 10,000 consult their GPs because of peptic ulceration, but the figure is gradually falling.<sup>1</sup> Perhaps there are some stoical types who have a symptomatic ulcer but do not consult, preferring to self-treat with one of the increasingly powerful antacid preparations available over the counter. However, patients seem to be less tolerant of symptoms generally, so it is more probable that the prevalence of peptic ulcer is genuinely in decline.

## PREVALENCE

More than 24 million prescriptions for NSAIDs are written each year, mainly for the elderly. Therefore, at any one time 15% of elderly people are taking such treatments. About 20% of these patients will have endoscopic evidence of a peptic ulcer, although in many cases it causes no symptoms.<sup>2</sup>

One in 20 patients will have a peptic ulcer during their life. Duodenal ulcers are most likely at the age of 40-50 years in men and 50-60 years in women. Gastric ulcers peak at the age of 50-60 years in men and 60-70 years in women. A GP can expect to see eight new cases of duodenal ulcer and two new cases of gastric ulcer each year.<sup>3</sup> Between 15% and 20% of patients with dyspepsia who undergo gastroscopy will have evidence of peptic ulcer or duodenitis.<sup>1</sup>

## PRESENTATION AND DIAGNOSIS

Peptic ulceration typically causes localised epigastric pain that is clearly related to eating. Food either makes it worse or better. Relief is obtained, even if only briefly, by taking antacids or after acid vomiting. The pain often occurs at night.

It is a relapsing and remitting disease, causing symptoms for 2-4 weeks, followed by a remission of 3-6 months.<sup>3</sup> Clinically, there is localised epigastric tenderness. Patients are often able to put the tip of a finger on a precise spot where the pain is worst.

Cancer should be suspected if there is evidence of anaemia, weight loss and copious vomiting, although a severe ulcer with pyloric stenosis can also produce such symptoms. Urgent investigation is required.

If left alone, a peptic ulcer will tend to relapse and remit for 10-25 years and then resolve.<sup>3</sup>

### Indigestion and dyspepsia

Patients do not present complaining of an ulcer - they present with indigestion. Given just the clinical signs, even experienced clinicians are likely to achieve only 50% accuracy in diagnosing the cause of indigestion.<sup>4</sup>

The term indigestion is in widespread use - patients generally use it to refer to a problem they see as a commonplace annoyance, rather than something

particularly serious. The findings of a community survey of patients' experiences of indigestion are summarised in Box 1. Patients often use the term indigestion to rationalise symptoms that have a more serious cause. For example, one reason why people having a heart attack delay calling for medical help is the hope that the pain is 'just indigestion'.

Dyspepsia, the medical equivalent term, is not well defined. In one of its guidelines, the National Institute for Clinical Excellence states that dyspepsia refers to "a broad range of symptoms related to dysfunction of the upper gastrointestinal tract from the oesophagus to the duodenum,

including retrosternal or epigastric pain, fullness, bloating, wind, heartburn, nausea and vomiting".<sup>5</sup>

The prevalence of dyspepsia is not changing.<sup>4</sup> A study has shown that 38% of adults experience some dyspeptic symptoms over a 6 month period.<sup>6</sup> Patients with dyspepsia account for 3-4% of general practice consultations and the loss of 1.5 million working days each year.<sup>3,4</sup>

Prescriptions for dyspepsia cost the NHS in England and Wales £521 million in 1998, of which £314 million was for proton pump inhibitors.<sup>5</sup> However, three-quarters of patients with dyspepsia treat themselves and do not attend a doctor.<sup>7</sup>

## CONSULTATION FOR DYSPEPSIA

The GP should listen to the patient's description of the symptoms. The site of any pain, any association of the pain with eating or hunger, relief or not with antacids - are all important clues. Further questions may reveal nausea or vomiting, heartburn or abdominal distension. There may be associated lower gastrointestinal symptoms.

Abdominal examination helps only slightly, but it will be expected. Its main value is to localise the pain and make sure there are no masses.

The symptoms may be gastrointestinal in origin. Alternatively, they may arise from the chest or abdominal wall, lungs or heart. These days, patients fearing a serious cause for their symptoms are often thinking of heart trouble. In previous years they were more likely to fear tuberculosis.

### Why attend now?

Most individuals with dyspepsia do not consult a doctor and so those who do must have a reason. Patients with severe symptoms are probably more likely to attend, but there is a considerable overlap in symptom severity between those who do and those who do not seek medical help.

The decision to consult depends on how worrying the symptoms are.

### Box 1. Severity of indigestion: patients' assessment.<sup>11</sup>

<input type="checkbox"/> 'Just a nuisance'	54%
<input type="checkbox"/> 'Considerable discomfort'	14%
<input type="checkbox"/> 'Unbearable'	3%
<input type="checkbox"/> Symptoms every week	25%

### Box 2. Dyspepsia: indications for early gastroscopy<sup>9</sup>

- Unintentional weight loss
- Iron-deficiency anaemia
- Gastrointestinal bleeding
- Dysphagia and pain on swallowing
- Previous gastric surgery
- Persistent vomiting
- Epigastric mass
- Suspicious barium meal results
- Previous gastric ulcer
- Use of NSAIDs
- Epigastric pain sufficient to hospitalise patient
- Recent-onset after the age of 45 years
- Troublesome symptoms in patients under 45 years old who are *H. pylori* positive on non-invasive testing

### What does this patient want?

Most GPs assume their patients attend for medicines and a cure. This is only partly true. Many want an explanation and perhaps some advice on treatment, after which they will happily return to self-management. Some expect investigation, especially if they think their dyspepsia signifies a serious disease or might lead to serious disease. Such beliefs can only be discovered by asking.

## INVESTIGATION

Most patients with dyspepsia can be safely treated symptomatically, at least for a time. Investigation is needed to secure a fuller diagnosis, but is also used to rule out stomach cancer.

Even if a gastric cancer is present, its prognosis is no worse after 4-6

weeks of symptomatic treatment.<sup>4</sup> Investigation should be considered if treatment fails to control symptoms, or if symptoms recur after 6 weeks of treatment.

Gastroscopy is the investigation of choice. It has a sensitivity of over 90% for upper gastrointestinal cancer, and a complication rate of under 1%.<sup>4</sup> Most GPs can refer to open-access gastroscopy services. Gastroscopy reveals no abnormality in 30-40% of cases, whether the referral is open access or from a specialist outpatient clinic.<sup>8</sup> Barium meal is an alternative for patients who are unable to tolerate gastroscopy, but it has a much higher false-positive rate for abnormalities.<sup>4</sup>

Some patients prefer to tolerate their symptoms or continue with symptomatic treatment rather than undergo gastroscopy. Their beliefs and wants should be respected, but the decision should be informed. The GP should explain why the procedure is recommended, and make a full record if the offer is still declined.

Some clinical features of dyspepsia may suggest that early referral or gastroscopy is a better idea than a trial of 6 weeks' symptomatic treatment. Though rare, upper gastrointestinal cancer is not a diagnosis to be missed.

The British Society of Gastroenterology (BSG) has published guidelines on the features that might indicate cancer and other serious pathology (Box 2).<sup>9</sup> The guidelines also suggest which patients should be offered gastroscopy even if symptomatic treatment has been effective.

GPs deal with 80% of cases of dyspepsia without referral.<sup>7</sup> Some patients ask for further investigation whether there are indications or not. This wastes resources, causes anxiety because of the wait for results and the inevitable false positives and false negatives, and reinforces inappropriate health-seeking behaviour. However, a normal gastroscopy reduces GP attendances for dyspepsia by two-thirds, and even an abnormal result reduces attendances by a third.<sup>8</sup>

## MANAGEMENT

Explanation of the likely cause of the symptoms is always welcomed. In many cases this will be all the treatment the patient wants.

Lifestyle advice may be appropriate, although there is little evidence that it makes much difference, at least in the case of reflux-like dyspepsia.<sup>10</sup> Particular foods that appear to aggravate the symptoms should be avoided. Cigarette smoking, excessive alcohol and spicy food may also cause problems, and weight should be controlled. Of course, advice on these issues could be given anyway on general health grounds - at least there will be no side-effects.

Attempts to encourage patients with dyspepsia to follow lifestyle advice are often disappointing. In a community survey, nearly two-thirds of people thought stress caused dyspepsia and 40% blamed diet, but only 25% blamed smoking and less than 20% thought analgesics could cause the problem.<sup>11</sup>

Symptomatic treatment through acid suppression is the most appropriate strategy. Initially, regular doses of antacid can be used. Magnesium-based mixtures tend to be laxative and aluminium-based mixtures are constipating, but both are inexpensive and can be bought without prescription. A number of proprietary preparations contain both aluminium and magnesium compounds, but these are more expensive.

Failing this, the H<sub>2</sub>-receptor antagonists cimetidine and ranitidine (Zantac) are both licensed for use in conditions 'where gastric acid suppression is beneficial'.<sup>12</sup> Both are on sale over the counter.

Proton pump inhibitors are indicated for up to 4 weeks' treatment for 'acid-related dyspepsia'.<sup>12</sup>

## *Helicobacter* infection

*Helicobacter pylori* is a small, curled, highly mobile, Gram-negative bacillus that lives in human gastric mucus. It is probably caught from other people.

It is found in 20% of 20 year olds, 50% of 50 year olds and so on, and over 70% of infected people are asymptomatic.<sup>13</sup>

*H. pylori* is responsible for 95% of duodenal ulcers found in people who do not take NSAIDs.<sup>14</sup> Overall, 15% of infected people will develop peptic ulcer or gastric cancer in the long term.<sup>13</sup>

There is good evidence that eradicating *H. pylori* in patients suffering from gastric or duodenal ulcer and not taking NSAIDs speeds ulcer healing and reduces recurrence. However, despite evidence implicating *H. pylori* as a cause of stomach cancer, there is no proof that eradication decreases an individual's risk.<sup>14</sup>

*H. pylori* can be identified invasively at gastroscopy or non-invasively in tests of blood, faeces or breath. All methods offer up to 95% specificity and sensitivity.<sup>13</sup>

The vast majority of patients with duodenal ulcer are infected with *H. pylori*, and eradication can proceed without testing.<sup>14</sup>

## practical points

- **The prevalence of dyspepsia is unchanged, but the prevalence of peptic ulcer is declining.**
- **A quarter of patients with dyspepsia consult a doctor, and a fifth of these are referred to secondary care.**
- **Most cases of dyspepsia can be treated symptomatically, with gastroscopy offered to those with symptoms that persist or suggest serious illness.**
- ***H. pylori* should be eradicated in patients with peptic ulcer. Tests for the organism are 95% sensitive and eradication is 90% successful.**
- **Advice on lifestyle changes is seldom successful.**

All gastric ulcers should be biopsied to exclude cancer. As it is difficult to distinguish gastric from duodenal ulcers without gastroscopy, it makes sense to investigate all patients with a suspected peptic ulcer and test for *H. pylori* at the same time.

The best treatments for *H. pylori* involve taking three drugs for a week - incurring three prescription charges. They consist of a proton pump inhibitor plus two out of amoxicillin, clarithromycin or a nitroimidazole such as metronidazole.<sup>12</sup> These regimens are 90% effective.<sup>14</sup>

Four weeks after treatment, if symptoms persist, a non-invasive test for *H. pylori* will show whether the eradication attempt has been successful. Eradication failure may be due to poor adherence to treatment or to treatment failure, which is often due to resistance to metronidazole. An alternative regimen using the other drugs is then required.

Gastric ulcers take longer to heal, and the BSG recommends a further 2 month course of antisecretory medication.<sup>9</sup> Continued treatment may also be needed in other cases if the symptoms are not fully resolved.

### Surgery

In 1958, 25% of ulcer sufferers ended up having surgery, but this is rarely needed now.<sup>3</sup> Where surgery is needed, it is usually because of a complication of the ulcer.

Surgery is still the best treatment for perforation, and is sometimes

needed for a bleeding ulcer. Pyloric stenosis may be the result of a long-standing ulcer, and will need surgical release.

### REFERRAL AND FOLLOW-UP

Reasons to refer to a specialist include:

- Cancer suspected or proven;
- Diagnostic uncertainty;
- Treatments not available outside hospital;
- Failure of treatment, symptoms persisting;
- Patients' wishes;
- Management problem, sharing responsibility.

One problem with peptic ulcer is the risk of recurrence, although this is very much reduced if *H. pylori* has been eradicated.

Some patients have continuing symptoms, but at lower severity. Some have other gastrointestinal problems as well as the ulcer, and they may need continued acid suppression with a proton pump inhibitor or another agent.

### ISSUES FOR THE PCT

The local primary care trust has a responsibility to:

- Encourage appropriate prescribing;
- Ensure availability of gastroscopy and non-invasive *H. pylori* testing;
- Commission urgent hospital access for suspected cancer.

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