

Dyspepsia is a group of symptoms, not a diagnosis. These symptoms include, pain in the upper middle part of the abdomen, bloating, pain behind the breastbone and nausea.

Diagnosis is often made using endoscopy: often no abnormalities are found (non-ulcer or non-reflux dyspepsia).

Conditions which may be identified include hiatus hernia, oesophagitis, gastritis, duodenitis, gastric/duodenal ulcer (and less commonly, cancer). Several of these conditions are associated with the presence of a bacterium: *Helicobacter pylori*

Dyspepsia (indigestion) occurs in between 23 and 41% of the population, the majority of whom will seek remedies from their local pharmacy. Only a quarter will visit their GP about this problem. (thus accounting for about 4% of GP consultations). Approximately 10% of these are referred on to specialists.

Of those patients who are investigated by endoscopy:

30% have no abnormal findings, 30% have gastritis, duodenitis, or hiatus hernia, 10-17% have oesophagitis, 10-15% have duodenal ulcer, 5-10% have gastric ulcer, and 2% have gastric cancer.

**TREATMENT:**

- Avoid risk factors: smoking, excess alcohol, aspirin and NSAID\* use.
- Avoid precipitating factors: alcohol, spicy or fatty foods, and coffee.  
Eat smaller meals and avoid eating just before bedtime
- Lifestyle modifications: Weight loss in obese patients, propping up the bed head, wearing looser clothing.
- Note: Over-the-counter painkillers such as aspirin may aggravate the condition.

\*NSAIDs: non-steroidal anti-inflammatory drugs: such as ibuprofen, naproxen etc. Adverse GI effects are well documented with these drugs. Further details below.

Other medication may be adversely affecting the lower oesophageal sphincter if there are predominant reflux symptoms; e.g. theophylline, nitrates, and calcium channel blockers (e.g. nifedipine, verapamil, and diltiazem).

The doctor may well not commence symptomatic treatment prior to tests being completed as this might mask the underlying problem.

Tests include a blood test to detect H.Pylori and perhaps an endoscopy: urgent endoscopy should be performed in patients with a history of unintentional weight loss, iron deficiency anaemia, gastrointestinal bleeding, dysphagia (modified barium swallow may be preferable), pain on swallowing, persistent vomiting, epigastric mass, suspicious barium meal, previous gastric ulcer.

Non-urgent endoscopy may be required for patients who are H. Pylori positive or who have been on NSAIDs, particularly if they need to continue on them.

H. Pylori is strongly associated with conditions such as gastric ulceration. Detection can be by blood test, breath test or during endoscopy by biopsy.

A negative result means that peptic ulcer is highly unlikely.

For H. Pylori positive patients, it may be prudent to eradicate the organism as a preventive measure as regards ulcers.

Triple therapies using at least 3 drugs are the only treatments that have consistently achieved eradication rates above 90%

The gold standard eradication treatment used to be tripotassium dicitratobismuthate (DeNol) combined with metronidazole and amoxycillin or tetracycline, given for two weeks.

However, more recently, regimes combining a proton pump inhibitor with two antibiotics, given for only one week, are as effective as well as having the advantage of simpler dosing and reduced side-effects.

There are a number of different regimes, most using the following combinations:

- Omeprazole/ lansoprazole, metronidazole and amoxycillin
- Omeprazole/ lansoprazole, clarithromycin and amoxycillin
- Omeprazole/ lansoprazole, metronidazole and clarithromycin

Side effects occur in up to 30% of cases: diarrhoea, nausea and vomiting, headaches and allergic reactions. The antabuse reaction may occur in patients who take alcohol with metronidazole. Antibiotic resistance may occur.

**SYMPTOMATIC TREATMENT:**

In undiagnosed causes of dyspepsia (who do not require endoscopy) relief may be obtained by using an antacid or antacid-alginate: e.g. Asilone, Maalox, Gaviscon.

If this fails then an H<sub>2</sub>-antagonist, which helps to reduce the acid level in the stomach, may well be effective: e.g. Tagamet, Pepcid, and Zantac. Prokinetic agents were being prescribed to reduce symptoms such as bloating or early satiety: this was by improving the stomach muscle action.

However, Cisapride (Prepulsid) was withdrawn from the market in July 2000 in the UK after it was found to affect the heart, causing serious abnormalities in heart rhythm.

Proton pump inhibitors (PPIs) are the most potent acid suppressant therapy available and are usually reserved for patients with a definite diagnosis, with GORD or with NSAID-related ulceration who need to continue with the NSAID treatment. Examples include Omeprazole (Losec) Lansoprazole (Zoton).

Side effects include diarrhoea, nausea, vomiting, constipation, flatulence, abdominal pain, headache, hypersensitivity reactions (rash, itching, bronchospasm), dizziness, blurred vision, swelling of feet, dry mouth and muscle/joint pain.

For patients with NSAID-related dyspepsia:

Ideally the NSAID should be stopped and in the majority of cases the dyspepsia will then resolve.

H<sub>2</sub>-antagonists are suitable first line choices as ulcer- healing medication, although PPIs can be also be used.

In those patients who require continued NSAID use, treatment may be aimed only at symptom relief or also at prophylaxis (prevention) of ulcer disease, depending on the degree of risk of the latter. Low-risk patients may be treated with H<sub>2</sub>-antagonists.

Higher risk of NSAID-related ulcer:

- H. Pylori positive
- previous history of ulcer
- oral steroid treatment
- large doses of NSAID
- generally unwell with more than one condition.
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These individuals require PPI treatment with misoprostol and Omeprazole, which are currently the only drugs licensed for both prophylaxis and healing of NSAID-associated gastric and duodenal ulcer disease.

The role of the new COX-2 selective NSAIDs is uncertain at the present time.

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