Box 1

Treatment options

Antacids

Self-medication with antacids or alginates is often an appropriate way of managing simple dyspepsia. Alginates forming a protective coating may be more useful in reflux symptoms when it has been decided that investigation is not necessary or as part of a step down strategy in reflux oesophagitis.

PPIs

PPIs reduce stomach acid by blocking the enzyme system responsible for active transport of acid into the gastrointestinal lumen. PPIs have a role in the treatment of peptic ulcers, gastro-oesophageal reflux disease (GORD), and in the prevention and treatment of drug-induced ulcers. The most common side-effects are diarrhoea, flatulence and headache although sometimes constipation is a problem.

Stepping treatment up or down: Generally if treatment begins with a high- or full-dose PPI the patient will be comfortable more quickly and more confident in the treatment and diagnosis. The long-term strategy will be to control the patient's symptoms with the most cost-effective medication. PPIs may not fully suppress acid production effectively over 24 hours when taken as a single daily dose. If acid reflux is the principal cause of symptoms then twice daily dosing may be more beneficial than doubling the dose once a day if symptom relief has been inadequate. Night-time acid suppression may be suboptimal if the PPI is taken only once each morning.

Drug interactions: The interaction between PPIs and benzodiazepines is probably of more clinical concern with omeprazole and esomeprazole than the other PPIs. Patients currently taking lansoprazole, rabeprazole, or pantoprazole and who are concomitantly taking CYP450-metabolised benzodiazepines such as diazepam should be cautioned that they may experience an increase in benzodiazepine-related effects when switched to omeprazole or esomeprazole. Occasionally it may be necessary to reduce the dose of benzodiazepine while taking the PPI. Phenytoin and warfarin effects may be increased by omeprazole and the absorption of some antifungal drugs such as ketoconazole and itraconazole may be reduced.

Histamine receptor antagonists

Histamine receptor antagonists (H_2RAs) can be used to treat uninvestigated dyspepsia and reflux disease. There is a difference in efficacy compared with PPIs. In dyspeptic patients response rate with H_2RAs is around 36% compared with 58% for patients on PPIs.[1] In endoscopy-negative reflux, head to head trials have indicated 42% symptom response in patients on H_2RAs compared with 53% in patients on PPIs.[1]

H_2RAs perhaps need to be considered as acid suppressant therapy in patients on clopidogrel as there is a proposed interaction between clopidogrel and PPIs (see below).

H_2RAs can be tried in patients intolerant to PPIs or where PPIs have been ineffective in uninvestigated dyspepsia and reflux disease. Ranitidine is preferred to cimetidine as the latter has a higher risk of drug interactions.

Drug interactions: There is an interaction between PPIs and clopidogrel. On the basis of this the recommendation issued by the MHRA (Medicines and Healthcare products Regulatory Agency) earlier this year is to avoid PPIs in patients taking clopidogrel unless absolutely essential and to consider H_2RAs. A statement to this effect has also been issued by the EMEA (European Medicines Agency). In cases where a PPI is absolutely indicated (i.e. the likelihood of significant GI bleeding outweighs the risk of acute coronary syndrome), then consider the use of pantoprazole which does not appear to switch off the conversion of clopidogrel to active moiety as omeprazole and lansoprazole do (in in vitro studies).