Proton pump inhibitors (PPIs) for the treatment of gastro-oesophageal reflux disease (GORD)

Preferred Drugs
THE RIGHT CHOICE, RIGHT NOW.
MEDICINES MANAGEMENT PROGRAMME

PANTOPRAZOLE is the preferred PPI for the treatment of GORD

Tips when prescribing PPIs

- Address **lifestyle issues** including advice on healthy eating, weight reduction where appropriate and smoking cessation.[1,2]
- Advise patients to avoid **known precipitants** associated with their dyspepsia symptoms such as smoking, alcohol, coffee, chocolate and fatty foods.[1,2]
- **Review medications** for possible causes of dyspepsia such as calcium channel blockers, nitrates, bisphosphonates, corticosteroids and NSAIDs.[1,2]
- Prescribe at the **lowest effective dose** for the **shortest treatment duration**.[3]
- **Review patients** after the initial course of treatment and at least annually for patients on long-term treatment reducing or stopping PPI treatment if symptoms are well controlled, unless there is a recognised indication for long-term treatment.[1,2]

Pantoprazole dosing information in GORD[4]

Indication	Dose	Duration	Note
Symptomatic GORD	20 mg daily*	2-4 weeks	If symptom relief/healing is not sufficient, continue treatment for a further four weeks.
Treatment of reflux oesophagitis	40 mg daily	4 weeks	
Prophylaxis of reflux oesophagitis	20 mg daily	Continuous	Increase to 40 mg daily for healing if a relapse occurs before reducing to 20 mg daily.

*With reoccurring symptoms, an on-demand regimen of 20 mg once daily when required can be used. Continuous therapy may be considered with unsatisfactory symptom control using an on-demand regimen.

Safety concern with PPIs

Gastric cancer: Particular care is required in patients presenting with alarm symptoms (e.g. significant unintentional weight loss); in such cases gastric malignancy should be ruled out before treatment.[3,4]

Cautions with PPI use**

Bone fracture: PPIs may increase the risk of bone fracture of the hip, wrist and spine, particularly when used at high doses for over a year in older people. Patients at risk of osteoporosis should have an adequate intake of vitamin D and calcium.[3,4]

Vitamin B12 deficiency: PPIs may reduce absorption of vitamin B12 with long-term treatment.[4]

Hypomagnesaemia: measurement of serum magnesium concentrations should be considered before and during prolonged treatment with a PPI, especially when used with other drugs that cause hypomagnesaemia or with digoxin.[3,4]

Gastrointestinal infections: PPIs may increase the risk of gastrointestinal infections caused by bacteria such as *Salmonella*, *Campylobacter*, *Clostridium difficile*.[3,4]

Subacute cutaneous lupus erythematous: PPIs are associated with very infrequent cases of subacute cutaneous lupus erythematous.[3,4]

Caution is required in prescribing PPIs long-term in older people, as side-effects are likely to be enhanced.[5]

** List not exhaustive, please see Summary of Product Characteristics (SmPC) for further information.

An evaluation report is available at www.hse.ie/yourmedicines.
Information on deprescribing PPIs is available overleaf.

References: 1. All Wales Medicines Strategy Group. Safe use of proton pump inhibitors (2018) 2. National Institute for Health and Care Excellence (NICE) Guidance CG184: Gastro-oesophageal reflux disease and dyspepsia in adults: investigation and management (2014) 3. British National Formulary (BNF) March 2018 4. Summary of Product Characteristics (SmPCs) Protium 20 mg & 40 mg 5. Prescribing PPIs. Drugs and Therapeutics Bulletin 2017; 55(10): 117-120
Abbreviations: GORD: gastro-oesophageal reflux disease NSAIDs: non-steroidal anti-inflammatory drugs PPI: proton pump inhibitor

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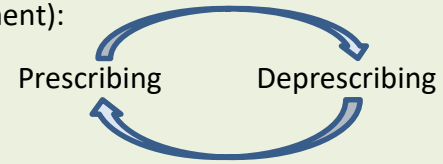
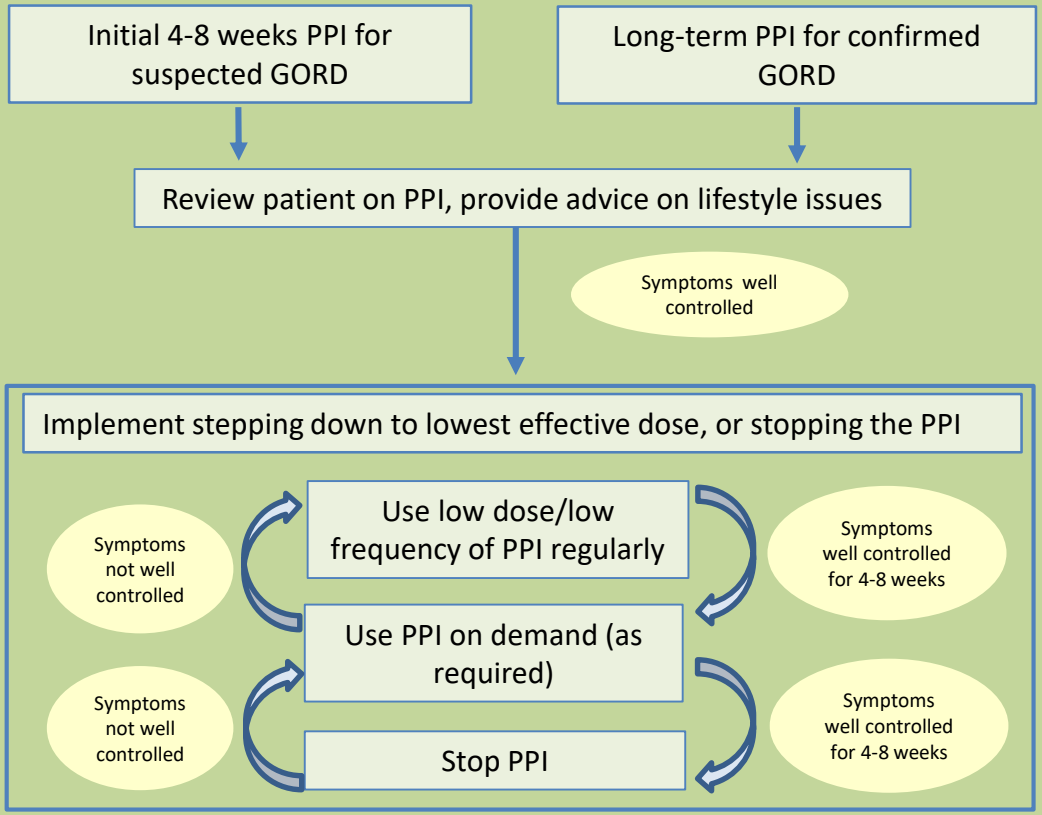
Deprescribing PPIs

Encourage patients who use PPIs long-term for the management of dyspepsia symptoms, to reduce their use of PPIs stepwise (unless there is a co-medication that requires gastro-protection or an underlying condition that needs continuing treatment):

1. Use the **lowest effective dose**
2. Use "**as needed**" when appropriate
3. Advise patients to **self-treat** with an antacid and/or alginate therapy.[2]



An example of an approach to assist in deprescribing a PPI in GORD



- The approach to stepping down a PPI should be individualised in consultation with the patient.
- A patient can move between the different step-down options, depending on their level of symptom control.
- **Rebound acid hypersecretion** resulting in an increase in reflux and dyspepsia symptoms, may occur during deprescribing:
  - To help limit the occurrence, the dose can be reduced gradually
  - Counsel patients about the risk of an increase in these symptoms
  - Advise patients to manage such symptoms with an **antacid and/or alginate**.[5]

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