Proton Pump Inhibitor (PPI): Deprescribing algorithm (adults)

Why is the patient prescribed a PPI? Does prescribing follow recommendations in NICE CG184?

If unsure, find out if the patient:
- Has previously had an endoscopy.
- Is taking PPI for gastroprotection against an ulcerogenic medicine.
- Has ever been hospitalised for a bleeding ulcer.
- Has ever had heartburn or dyspepsia.

Indication still unknown?
- Mild to moderate oesophagitis or GORD treated x 4-8 weeks (oesophagitis healed, symptoms controlled)
- Peptic ulcer disease treated for 2-12 weeks (from NSAID use; H. pylori).
- Upper GI symptoms without endoscopy; asymptomatic for 3 consecutive days.
- ICU/surgery stress ulcer prophylaxis treated beyond a hospital admission.
- Uncomplicated H. pylori treated for 2 weeks and now asymptomatic.

Documented history of any of the following:
- Barrett’s oesophagus
- Severe oesophagitis
- History of bleeding GI ulcer
- On-going, uncontrolled GORD
- Used for gastro-protection as patient is co-prescribed a potentially ulcerogenic medicine:
  - Antiplatelets
  - Anticoagulants
  - Corticosteroids
  - SSRI + NSAID.

Recommend deprescribing the PPI

- Taper to lower dose: Evidence suggests no increased risk in return of symptoms compared with continuing higher dose, OR
- Stop and use on demand: Daily until symptoms stop [10% of patients may have return of symptoms].

Stop the PPI

If potentially ulcerogenic medicine(s) stopped.

Continue the PPI

Monitor at 4 & 12 weeks for:
- Heartburn
- Dyspepsia
- Regurgitation
- Epigastric pain
- Loss of appetite
- Weight loss

Non-pharmacological interventions:
- Avoid meals 2-3 hours before bedtime.
- Elevate head of bed.
- Address if a need for weight loss.
- Avoid dietary triggers, e.g. caffeine, chocolate, fatty foods.
- Smoking cessation.
- Reduce/stop alcohol intake.

Manage occasional symptoms using:
- Over the counter: Antacid, alginate, PPI, H2RA - take as required.
- H2RA daily [up to 20% of patients may have return of symptoms].

If symptoms relapse:
If symptoms persist for between 3-7 days and interfere with normal activity:
1) Test and treat for H. pylori, if present. 2) Consider returning to previous dose. 3) Further attempt to stop the PPI after 2-4 weeks of continued therapy.
Proton Pump Inhibitor (PPI): Deprescribing notes

General principles of deprescribing
Treat the patient as an individual, use shared decision-making – patients are more likely to engage if they understand the rationale for deprescribing at initiation of a new medicine. Taper doses, unless a severe adverse drug event (ADE or side effect) is experienced.
Patients with multimorbidity who are treated according to guidelines are prescribed a large number of medicines. This polypharmacy increases the risk of an ADE. Stopping medication may relieve these effects, and thereby improve the patient’s wellbeing.

Specific therapeutic information
A short course of a PPI with review and stopping criteria is appropriate for some indications. Risks of PPIs if used long-term include: increased fractures; C difficile infections; diarrhoea; community acquired pneumonia; vitamin B12 deficiency; hypomagnesaemia; dementia; acute interstitial nephritis and chronic kidney disease.
The risk of side effects may outweigh the benefits when an on-going indication is unclear. Efficacy of PPIs in patients without erosions is lower than in those with established erosions.
Tapering doses: There is no evidence one approach is best, but gradual step down reduces the risk of rebound hyperacidity and the need to reinstate. Advise patients there may be an increase in symptoms for a few days.
Offer lifestyle advice along with reducing the frequency and dose or stopping the PPI and advise use on demand. Use shared decision-making to understand what is convenient and acceptable to the patient.

References
• Summaries of Product Characteristics. Available from www.medicines.org.uk/