

# Deprescribing Proton Pump Inhibitors

## Simple steps to stop proton pump inhibitors

### Engaging patients and carers

Patients and/or carers may be more likely to engage if they understand the rationale for deprescribing (risks of continued PPI use; long-term therapy may not be necessary), and the deprescribing process (see page 2).

### PPI side effects and risks

When an ongoing indication is unclear, the risk of side effects may outweigh the benefit.

- PPIs are associated with higher risk of fractures, C. difficile infections, diarrhoea, community-acquired pneumonia, vitamin B12 deficiency, hypomagnesaemia, hyponatraemia, acute interstitial nephritis and chronic kidney disease.
- Common side effects include headache, nausea, diarrhoea and rash.

### Tapering doses and self care

There is no evidence to suggest that one tapering approach is better than another however gradual step down reduces the risk of rebound hyperacidity and the need to reinstate.

- Lowering the PPI dose
  - Reduce from twice daily to once daily, or halving the dose, or taking every second day **OR**
  - stopping the PPI and using it on-demand is equally a recommended strong option. Advise the patient to use on-demand daily PPI for a period sufficient to resolve reflux-related symptoms; following symptom resolution discontinue the medication until symptoms recur and restart PPI daily until the symptoms resolve.
- Choose what is most convenient and acceptable to the patient.
- Advise the patient there may be an increase in symptoms for a few days.
- Managing occasional reflux symptoms
  - Advise the patient to purchase OTC remedies such as antacids, alginates and H2RA's.
- Lifestyle and diet changes should be maintained to resolve reflux related symptoms.
  - 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
  - Regular exercise

#### References

1. Canadian Deprescribing Network [https://deprescribing.org/wp-content/uploads/2018/08/ppi-deprescribing-algorithm\\_2018\\_En.pdf](https://deprescribing.org/wp-content/uploads/2018/08/ppi-deprescribing-algorithm_2018_En.pdf)
2. Prescqipp <https://www.prescqipp.info/media/1574/attachment-2-proton-pump-inhibitor-desprescribing-algorithm-21.pdf>

# Proton Pump Inhibitor Deprescribing Algorithm

## 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.
- Has ever been hospitalised for a bleeding ulcer.
- Is taking PPI for gastroprotection against an ulcerogenic medicine.
- 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
  - NSAID or SSRI +NSAID

**Recommend deprescribing the PPI**

- Taper to lower dose(see page 1): Evidence suggests no increased risk in return of symptoms compared with continuing higher dose, OR
- Stop and use on demand (see page 1): Daily until symptoms stop

**Stop the PPI**

If potentially ulcerogenic medicine(s) stopped.

**Continue the PPI**

Monitor at 4 & 12 weeks for:

- Heartburn
- Regurgitation
- Loss of appetite
- Dyspepsia
- Epigastric pain
- 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 **or**
- H2RA daily

### 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.