Clinical Indications for Proton Pump Inhibitors and Tapering Information When Indicated

MacKenzie Crist, Pharm.D. Candidate 2017
Nabila Ahmed-Sarwar, Pharm.D, BCPS, CDE

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Appropriate indications for PPIs

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<th>Short-Term Treatment</th>
<th>Long-Term Treatment</th>
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<td>● GERD</td>
<td>● Refractory GERD</td>
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<td>● Gastric and duodenal ulcers</td>
<td>● Erosive esophagitis</td>
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<td>● H. pylori co-therapy</td>
<td>● Barrett's esophagus</td>
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<td>● History of NSAID induced bleeding ulcers</td>
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<td>● Chronic anticoagulation after a GI bleed</td>
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<td>● NSAID or dual anti-platelet agent use*</td>
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*presence of multiple risk factors: Age>65 years, high dose NSAID therapy, PUD, concurrent corticosteroids or anticoagulants

Treatment Recommendations for GERD

- Initial eight-week course of therapy
  - Try to lower dose, as needed therapy, or intermittent therapy
- Refractory GERD—No response to PPI therapy after two to three months (needs GI consult and endoscopy)
  - Add a bedtime H2 blocker if nocturnal symptoms
  - Double the dose

Concerns with Chronic PPI Therapy

- Clostridium difficile infections
- Hypomagnesaemia
- Increased fracture risk
- Acute interstitial nephritis (rare, idiopathic)
- Chronic kidney disease (weak observational data may be associated with dose and duration)

When PPIs Should Be Tapered and Not Abruptly Discontinued

- Patients who do not have any appropriate indications for continuing a PPI, but have been on a PPI for > six months, and asymptomatic at least 3 months
- Counsel patient on initial worsening of symptoms during tapering phase

PPI Tapering Algorithm

**Step 1: Tapering Schedule**

Patient dose of PPI higher than the following?

- Omeprazole, esomeprazole, rabeprazole >20mg
- Pantoprazole >40 mg
- Lansoprazole >15 mg
- Dexamethasone >30 mg

- **No**
  - Extend PPI dosing interval to every other day for 2-4 weeks
  - Discontinue PPI and reassess in 2 weeks

- **Yes**
  - Take half of current dose for 2-4 weeks
  - Extend PPI dosing interval to every other day for 2-4 weeks
  - Discontinue PPI and reassess in 2 weeks

**Step 2: Management of Recurrence**

After discontinuation: Did patient have recurrence of symptoms?

- Start ranitidine 150 mg BID for 2 weeks
- Start ranitidine 150 mg daily for 2 weeks
- Utilize PRN antacid or ranitidine

$H_2$ Antagonist and antacids may be added while tapering for breakthrough symptoms.

After discussing with your medical team and deciding to wean off the medication you can do the following:

- **If you are taking a PPI once daily:** start taking one pill every other day, continue for 2 weeks and then stop. If you are on a higher dose, your doctor may start by prescribing a lower one. In this case, take the lower dose once daily for 2 weeks, then every other day for 2 weeks, then stop.

- **If you are taking a PPI twice daily:** start taking one pill daily 2 weeks, then take one pill every other day for 2 weeks then stop.

### Tips for Success

- Symptoms may come back while your body gets used to working without a PPI. These should get better within a few days to weeks. If they develop, wait until they get better before reducing your dose further.
- Use antacids like Tums (or generic) for fast relief. These will work in about 10 minutes.
- Try an H2 blocker like Zantac (ranitidine). These will work in about 1 hour and can be used with antacids.
- Avoid foods that make your symptoms worse (i.e. spicy, fatty, or acidic foods).

### When to call my doctor?

- If symptoms appear to be getting worse at any point while you are stopping the medication.
- If after stopping your PPI for 4 weeks you are having symptoms 2 or more times per week.

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**What are PPIs?**

Proton pump inhibitors (PPIs) are medications used to reduce the amount of acid in your stomach. They are most commonly used to treat heartburn. Examples of PPIs include:

- Prilosec, Zegerid (omeprazole)
- Nexium (esomeprazole)
- Protonix (pantoprazole)
- Prevacid (lansoprazole)
- Dexilant (dexlansoprazole)
- Aciphex (rabeprazole)

**Why should I stop my PPI?**

Many patients who are taking PPIs for heartburn can control symptoms with small changes to their diet or by using other medications called antacids (i.e. Tums) or H2-receptor blockers (i.e. ranitidine or Zantac) as needed. This may allow you to take fewer pills each day.

Some long-term risks of ongoing use of PPIs are increased risk of infection, and reduced kidney function. Before stopping your PPI, you should talk to your doctor.

**I tried to stop my PPI before but my symptoms came back.**

If you have been on a PPI for a long time, your body is used to working with one. If you stop a PPI without weaning down, your body may over-react and produce more acid which causes increased symptoms. See the next section, "How to Stop Your PPI."