## PPI therapy is indicated when

<table>
<thead>
<tr>
<th>GERD with or without endoscopic esophagitis</th>
<th>Dyspepsia with or without burning sensation</th>
<th>Gastric or Duodenal ulcers</th>
<th>Helicobacter Pylori (H. Pylori)</th>
<th>NSAID prophylaxis</th>
</tr>
</thead>
<tbody>
<tr>
<td>ULCER-LIKE epigastric pain/discomfort dominant</td>
<td>Reflex-like heartburn and/or regurgitation</td>
<td>Evaluate possible causes:</td>
<td>Confirm diagnosis</td>
<td>If 1 or more of the following risk factors:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• H. pylori,</td>
<td>• Stop PPI therapy 3 days before the test to avoid false negative result. Preferably, stop for 2 weeks if the patient can tolerate symptoms</td>
<td>• Age &gt; 65 years</td>
</tr>
<tr>
<td>Start therapy if symptoms are moderate to severe:</td>
<td></td>
<td>• NSAID use,</td>
<td></td>
<td>• Concurrent use of glucocorticoids</td>
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<tr>
<td>• ≥ 2 days a week</td>
<td></td>
<td>• use of anti-platelet agents</td>
<td></td>
<td>• Anticoagulants or concurrent use of anti-platelet agents</td>
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<tr>
<td></td>
<td></td>
<td>All gastric ulcers and duodenal ulcers need PPI therapy</td>
<td></td>
<td>• Consider PPI if NSAID is added to ASA and patient has significant co-morbidities</td>
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<tr>
<td></td>
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<td>Need for long term therapy depends on the cause</td>
<td></td>
<td></td>
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<tr>
<td>Note</td>
<td></td>
<td>Use antacid instead of PPI, prior to the test.</td>
<td></td>
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<tr>
<td>PPIs do not work in dysmotility-like dyspepsia (upper abdominal bloating dominant)</td>
<td></td>
<td>See H. Pylori link in Resources</td>
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</tbody>
</table>

## Dosing & Length treatment

<table>
<thead>
<tr>
<th>Start once daily PPI for 4-8 weeks (30 minutes before breakfast), then reevaluate</th>
<th>Stop therapy if good response after 8 weeks</th>
<th>Retreat if symptoms recur</th>
<th>Consider “on demand” therapy for recurrent symptoms</th>
<th>Try twice daily PPI for 4-8 weeks if partial or no response</th>
</tr>
</thead>
<tbody>
<tr>
<td>H. pylori-negative non-NSAID ulcers require long term PPI therapy</td>
<td>Upper GI / bleeding ulcer needs PPI twice daily for 8-16 weeks. Then decrease to once daily</td>
<td>Give twice daily PPI for two weeks together with antibiotics</td>
<td>Subsequent need for once daily PPI therapy depends on symptoms + indications</td>
<td>Start once daily PPI when initiating NSAID</td>
</tr>
</tbody>
</table>

## Referral to a GI

Reevaluate the diagnosis, if no response after 8–16 weeks, consider referral to a gastroenterologist when:
- age >60 with new and persistent symptoms (>3 months)
- persistent vomiting (not associated with cannabis use)
- gastrointestinal bleeding (hematemesis or melena)
- anemia (iron deficiency or low Hb)
- involuntary weight loss (≥ 5-10% of body weight over 6 months)
- progressive dysphagia
- personal history of peptic ulcer disease
- first degree relative with history of esophageal or gastric cancer

For gastric ulcers: an endoscopic evaluation is necessary to rule out gastric cancer

Yes if three H. Pylori treatment regimens fail.

Refer to H. Pylori clinical pathway for treatment regimens (yellow box on the right).

No

## If indication for PPI therapy is unknown

1. Investigate why the patient is on a PPI
2. Deprescribe PPI if no indication was identified

### Talk with your patient about...

- Rebound hypersecretion of acid may occur after stopping the PPI for 1 to 2 weeks. This can result in temporary reflux & dyspepsia symptoms.
- Healthy changes like stopping smoking and eating healthy may help as they are important risk factors for GERD, dyspepsia and ulcers.

### Resources

- Help reduce overuse or inappropriate use of medications
- Start therapy if symptoms are moderate to severe:
  - ≥ 2 days a week
  - Ulcer-like epigastric pain/discomfort dominant
  - Reflux-like heartburn and/or regurgitation

Note

PPIs do not work in dysmotility-like dyspepsia (upper abdominal bloating dominant)

- Evaluate possible causes:
  - H. pylori,
  - NSAID use,
  - use of anti-platelet agents

- Confirm diagnosis
  - Stop PPI therapy 3 days before the test to avoid false negative result. Preferably, stop for 2 weeks if the patient can tolerate symptoms
  - Use antacid instead of PPI, prior to the test.
  - See H. Pylori link in Resources

- If 1 or more of the following risk factors:
  - Age > 65 years
  - History of ulcers or significant dyspepsia
  - Concurrent use of glucocorticoids
  - Anticoagulants or concurrent use of anti-platelet agents
  - Consider PPI if NSAID is added to ASA and patient has significant co-morbidities

### Start therapy if symptoms are moderate to severe:

- ≥ 2 days a week
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### Note

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### Confirm diagnosis

- Stop PPI therapy 3 days before the test to avoid false negative result.
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  - Consider PPI if NSAID is added to ASA and patient has significant co-morbidities

### To prevent recurrence use the lowest frequency of dosing.

### Beyond 12 months is long-term PPI therapy

### Help reduce overuse or inappropriate use of medications

### Healthy changes like stopping smoking and eating healthy may help as they are important risk factors for GERD, dyspepsia and ulcers.

### Patient Education - Managing Acid Reflux

### Choosing Wisely Canada recommends reducing / stopping PPI therapy at least once per year in most patients

### For healthcare providers

- GERD Primary Care
- Dyspepsia Primary Care
- H. Pylori Primary Care

### For patients and healthcare providers

- PPI poster to hang in clinic or pharmacy
- PPI shared decision making tool

### Contact Specialist LINK or ConnectMD to ask a specialist a question

For these and other tools, visit the Physician Learning Program website

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