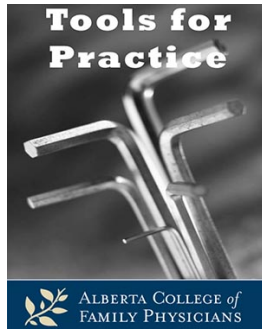


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Proton Pump Inhibitors (PPIs): Is Perpetual Prescribing Inevitable?

Clinical Question: How successful are attempts to stop PPIs and how can clinicians improve chances of success?

Bottom Line: Using a range of deprescribing strategies, about 25% of patients with gastroesophageal reflux disease (GERD) or dyspepsia can stop PPI use and another 30-50% can decrease their dose. Older patients and those who taper appear more successful in stopping PPIs.

Evidence:

- Clustered randomized controlled trials:
 - Patients (n=196) taking twice daily PPIs for >8 weeks were randomized to receive information pamphlets with academic detailing for their physician versus standard care.¹ At six months:
 - 30% stopped PPI or changed to Histamine Receptor Antagonists (H2RA) versus 19% in control group, Number Needed to Treat (NNT)=10.
 - Additional 50% reduced PPI dose.
 - 113 dyspeptic patients randomized to receive a letter encouraging stopping/decreasing PPIs or usual care.² At 20 weeks:
 - 13% off PPI, compared to 5% in control group (NNT=13).
 - Additional 9% reduced their dose.
- Cohort studies of patients on PPIs for >8 weeks:
 - 73 Veterans with GERD attempted taper then stopping PPI.³ At one year:
 - 34% switched to H2RA, 15% off all acid reducers.
 - Older patients appeared more successful in stopping.
 - 166 dyspeptic/GERD patients offered *H. Pylori* testing and treatment, then educated about symptoms, lifestyle and PPIs.⁴ At one year:
 - 34% stopped, additional 50% reduced their dose.
 - 27 GERD patients reviewed PPI use at periodic health exam.⁵ At 10 weeks:
 - Ten (37%) stopped PPI: Six completely, four changed to H2RA.
 - Of 97 predominantly GERD patients with normal gastroscopy, 27% stopped PPIs at one year.⁶

Context:

- ~60% long-term PPI users may not need them.⁷
- PPI use associated with (but causation unclear):
 - *Clostridium difficile* colitis:
 - Community dwelling without antibiotics (1/10,000 risk)⁸ to in-hospital on antibiotics and PPIs (8-10% risk).⁹
 - Fractures: Extra one in 2000 women over eight years.¹⁰
 - Pneumonia.¹¹
 - Vitamin B12 and magnesium deficiencies.^{12,13}
- Abruptly stopping PPIs may cause transient rebound GERD or dyspepsia symptoms.^{14,15}
 - Tapering may help.⁶
- Long-term PPIs should be considered for patients with recurrent symptoms, endoscopic esophagitis, complications from GERD (example: stricture), or those requiring gastroprotection.

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Disclosure:

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