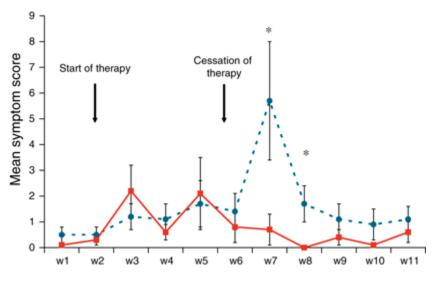




Helping Taper off a Proton Pump Inhibitor

For those patients who have made positive lifestyle changes and may not need continued chronic acid suppression, it can be difficult to come off PPIs since they often cause rebound hyperacidity even if the underlying condition has resolved.¹ Below is a chart showing symptoms of dyspepsia in ASYMPTOMATIC people given 40 mg of pentoprazole for 6 weeks. Rebound dyspepsia lasted 10-14 days (Ref #1)



Blue = Took PPI; Red = Placebo group

Plan:

- 1. Focus on nutrition. Common foods that should be avoided in those with GERD include: alcohol, caffeine (coffee), chocolate, cow's milk, animal fat and orange juice.
- 2. Slowly taper off the PPI over 2-4 weeks (the higher the dose, the longer the taper).
- 3. While the taper is being completed, use the following for bridge therapy to reduce the symptoms of rebound hyperacidity.
 - Encourage regular aerobic exercise.
 - Encourage a relaxation technique such as deep breathing. (This enhances vagal stimulation, encouraging digestion and aids adequate peristalsis. See: <u>Handout on breathing exercises</u>).
 - □ Acupuncture 1-2 times per week²

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- Add one or more of the following:
 - Deglycyrrhizinated Licorice (DGL), 2-4 380 mg tablets before meals or Sucralfate (*Carafate*) 1 gm before meals.
 - Slippery Elm, 1-2 tbsp of powdered root in water or 400-500 mg capsules or 5 ml of a tincture TID to QID
 - A combination botanical product, *Iberogast*® (Clown's mustard, German chamomile, angelica root, caraway, milk thistle, lemon balm, celandine, licorice root and peppermint leaf). 1 ml TID³ (Can get here: <u>Iberogast on Amazon</u>)*
- 4. If the patient is successful, slowly taper off the above (except for positive nutritional changes, exercise and stress management). If symptoms return, start with one of the above or an H2-Blocker. If symptoms are still difficult to control, consider adding the PPI back.
- 5. Ideally it would be beneficial to avoid long-term acid suppression if possible since this can be associated with malabsorption of vitamin B12 and iron,⁴ increased risk of community acquired pneumonia, ⁵ hip^{6, 7} and spine^{8, 9} fracture, and C. diff diarrhea.¹⁰

References

- Niklasson A, Lindstrom L, Simren M, Lindberg G, Bjornsson E. Dyspeptic symptom development after discontinuation of a proton pump inhibitor: A double-blind placebo-controlled trial. Am J Gastroenterol. 2010; Jul;105(7):1531-7.
- 2. Dickman R, Schiff E, Holland A, et al. Clinical trial: Acupuncture vs. doubling the proton pump inhibitor dose in refractory heartburn. Aliment Pharmacol Ther. 2007; 26(10):1333-1344.
- 3. Melzer J, Rosch W, Reichling J, Brignoli R, Saller R. Meta-analysis: Phytotherapy of functional dyspepsia with the herbal drug preparation STW 5 (iberogast). Aliment Pharmacol Ther. 2004; 20(11-12):1279-1287.
- 4. Jensen RT. Consequences of long-term proton pump blockade: Insights from studies of patients with gastrinomas. Basic Clin Pharmacol Toxicol. 2006; 98(1):4-19.
- 5. Laheij RJ, Sturkenboom MC, Hassing RJ, Dieleman J, Stricker BH, Jansen JB. Risk of community-acquired pneumonia and use of gastric acid-suppressive drugs. JAMA. 2004; 292(16):1955-1960.
- 6. Corley DA, Kubo A, Zhao W, Quesenberry C. Proton pump inhibitors and histamine-2 receptor antagonists are associated with hip fractures among at-risk patients. Gastroenterology. 2010; 139(1):93-101.
- 7. Gray SL, LaCroix AZ, Larson J, et al. Proton pump inhibitor use, hip fracture, and change in bone mineral density in postmenopausal women: Results from the women's health initiative. Arch Intern Med. 2010; 170(9):765-771.
- 8. Kwok CS, Yeong JK, Loke YK. Meta-analysis: Risk of fractures with acid-suppressing medication. Bone. 2010 Dec 23 [e-pub ahead of print].
- 9. Insogna KL. The effect of proton pump-inhibiting drugs on mineral metabolism. Am J Gastroenterol. 2009; 104 Suppl 2:S2-4.
- 10. Cunningham R, Dale B, Undy B, Gaunt N. Proton pump inhibitors as a risk factor for clostridium difficile diarrhoea. J Hosp Infect. 2003; 54(3):243-245.

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