Stomach Acid Suppressing Drugs and Reflux

(… a combination that's hard to swallow)

By Angela Frieswyk, BSc, DipHerbMed, MNZAMH

Omeprazole (sold under a variety of brand names, including Losec, Prilosec etc) is a worldwide top-seller and is now set to become an even bigger "cash cow" since the recent reclassification from a prescription-only medication to an 'over the counter' drug. This reclassification was accompanied by a prime time television marketing campaign, positioning one brand of omeprazole to become as well-known and easy to obtain as a box of band-aids. Not an amusing analogy, given that omeprazole is often an inappropriate 'band-aid' for many of the conditions it is prescribed and now counter sold for.

Omeprazole is from a class of drug called proton pump inhibiters (PPIs), which suppress gastric acid levels by as much as 90%. On the face of it omeprazole does reduce symptoms supposedly associated or worsened with gut acidity, such as reflux-like symptoms (eg heartburn or regurgitation), plus hiatus hernia, duodenal and peptic ulcers. However, omeprazole often does not address the underlying cause of many these conditions and has been proven to create a dependency for symptom relief.[7]

Contrary to popular belief, high gastric acidity is a relatively rare scenario and PPIs may often be prescribed for symptoms that are a consequence of low gastric acidity. Gastric acidity is known to decline with age. In people who are eating a highly refined western diet which is low in fresh, raw foods that helps initiate the digestive processes, including stomach acid production the aging process may be accelerated and stomach acid secretion may become deficient at a younger age. Highly beneficial raw bitter greens, sour fruits and fermented foods, for example, have typically been replaced by our preference for sweet, salty, fatty and cooked foods which are taxing on digestive function.

When gastric acidity declines or is artificially suppressed, digestion is incomplete, allowing the fermentation process to kick in. The problem with fermentation is that it drives the production of organic acids, which can often result in mistaken symptoms of intrinsic hyperacidity; burning, nausea and belching.

Aside from this, excess fatty foods, inactivity and obesity are also thought to be associated with relaxed tone of the oesophageal sphincter, which provides the mechanical barrier between gastric acid and the sensitive oesophagus. But again, reducing gastric acidity will not fix these problems. Omeprazole's popularity, however, remains strong no doubt due to the efficient removal of symptoms, if not the cause. In this article I hope to pass on the concerns with taking this medication, particularly in the long-term.

Good stomach acid production is particularly essential for mineral absorption, most notably for iron, calcium, magnesium and zinc. Several studies have already associated PPI's with an increased risk of osteoporosis and bone fractures, undoubtedly due to malabsorbtion of calcium and other bone building nutrients. One large study, which could be considered to be fairly reflective given that it observed 135,000 participants, indicated a 2.6 higher risk of hip fracture after just one year of PPI use.[1]

Chronic low magnesium has also been associated with long-term PPI use, resulting in isolated cases of muscle spasm, irregular heartbeat and convulsions. This and other studies sparked the FDA to notify healthcare professionals and the public but did not warn of the more common magnesium deficiency symptoms such as fatigue, muscle stiffness, poor mental cognition and sleep problems. [2] A small, but convincing study, has also shown a near four-fold increase in certain types of focal arrthymias amongst PPI users, researchers have recommended follow-up research, it will be interesting to see what action unfolds.[9]

Minerals are not the only building blocks that are inhibited by PPI use, protein, vitamin B12 and folic acid deficiency have long been associated with low gastric acidity and acid reducing medications (particularly PPIs). Interestingly, a number of relatively common side-effects of PPIs are similar to symptoms of vitamin B12 deficiency, such as headaches, dizziness, confusion and fatigue. Suppressed stomach acidity has also been linked to reduced gut defense against pathogens that are normally inactivated by the stomach acid. This can result in increased risk of gastrointestinal infections, particularly to *Helicobacter pylori*, *Salmonella*, *Campylobacter* and *Clostridium difficile*[5]. Increased risk of infection is not just limited to gastro-intestinal infections, a 2004 study also found a significantly higher risk of developing pneumonia, an example of a greater systemic effect at play.[6]

Some researchers have also suggested a link between PPIs and gastric cancer. [4] The mechanisms behind this could be many, but so far has focused on the higher incidence of *H.pylori* infection, atrophic gastritis or higher gastrin levels in PPI users. There has been some research on rats backing up a higher incidence of cancer with PPI administration, but no human studies. The pharmaceutical industry has therefore strongly protested such a

claim, though judgment should be reserved given that cancer can take several decades to develop, while PPIs have been on the market fewer than 15 years.

It can be argued that PPIs have a role in certain cases, for example, in the treatment of extreme symptoms when all else fails or short term use to allow healing of an ulcer. However, there is a great need to always attempt to understand the cause of the problem, be it an over-refined diet, weight gain, stress, infection, dybiosis, food intolerances, toxicity or something else. With this understanding the practitioner and patient can first attempt safer approaches for symptom relief, aiming to resolve the cause and avoid creating a drug dependency.

Dependency on PPIs can occur relatively quickly as reflux-like symptoms are often worsened when a PPI is initially stopped. This is thought to be a rebound effect, where the body overcompensates with excess acid production after the period of artificial suppression. While these rebound symptoms may be difficult to experience, the symptoms usually resolve within a few weeks and can be greatly assisted by an appropriately prescribed alternatives to medication.

If you experience severe digestive symptoms or you have already been on acid reducing medication for some time I strongly recommend that you seek practitioner guidance to discuss alternatives. Some of the more common treatments may include slippery elm after meals to help create a barrier between the gastric acid and the sensitive esophagus; deglycyrrhized liquorice to encourage a protective mucus coat; cabbage juice; and certain nutrients for improving oesophageal sphincter strength.

It is also important to set up a treatment that will gently start encouraging digestion, without aggravating existing symptoms (a bit of practitioner experience and intuition is often required here!). Restoration of gut flora, treating infection and correcting nutrient deficiencies may also be required. Treatment of reflux-like symptoms is rarely a quick fix and requires a good amount of "home-work"' from clients, including changes of food choices and eating habits, weight loss, giving up smoking, reducing alcohol and coffee, exercise and addressing unresolved emotions and stress.

Infant Reflux and Omeprazole

This is a very sensitive topic given that those infants prescribed omeprazole are usually (or used to be) the extreme cases of reflux which can be very distressing for the infant and exhausting for the parent. Unfortunately some extreme cases of severe infant acid reflux can slow weight gain and damage the oesophageal or lung lining. I have, however, seen a trend over the years of increased infant omeprazole use, and it is concerning to think that either severe infant reflux is on the rise or prescribers are becoming more complacent about prescribing it for babies. There is an alarming need for studies to be done on the safety of omeprazole for infants and children. Unfortunately there are almost none to date.[10]

It is also evident that some toddlers are being left on omeprazole. Typically reflux is grown out of as the oesophageal sphincter gains tone, while dietary intolerances that often worsen reflux also start to ease (though not always). Given that studies have identified a dependency to PPIs, that is, symptoms worsen when a PPI is initially stopped, are parents or prescribers accurately assessing whether these toddlers still need to be medicated? While only a matter of opinion, I also strongly suspect childhood food intolerances will actually be worsened by longer term PPI use due to suppressed digestion. And the other concerns of nutrient malabsorption and impaired immunity need to be seriously considered.

Before resorting to Losec for infants PLEASE first see a practitioner to try an alternative approach, including possible changes to breastfeeding mum's diet. As a simple place to start try ¼ teaspoon unadulterated slippery elm mixed in water (which has been boiled) or breastmilk before feeds. Success has also been seen with the proprietary blends, Iberagaast or Rhugers Mixture, typically gaining effect over a few days. Infant probiotics may also be required. Keep the infant feeling secure and protect from stress (infants will pick up on your own stress too). Diluted Rescue Remedy maybe helpful for emotional distress (baby and parents). In some cases osteopathic or chiropractic treatment may assist with mechanical problems. Other practical measures include raising the head end of the cot and holding baby upright for 30 minutes after feeds. These are just a few of many suggestions; please seek practitioner help if you are not succeeding in solving the problem by yourself.

About the Author

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Links to studies or more information on potential health risks of PPIs: See Page 55