**The best ever:**

Life is filled with decisions requiring an evaluation of risks and benefits. The benefits of the PPI are well known, both in terms of symptom relief and prevention of esophageal cancer, healing of ulcers, eradication of H. pylori. The studies noting an ASSOCIATION between PPI and dementia, renal disease, heart disease, osteoporosis are ALL retrospective studies. Read the actual studies before you draw conclusions. Look at absolute risk, not relative risk. For example a 40% increase in the risk of osteoporosis , a risk ratio of 1.4,The absolute risk of hip fracture was 2.02 events per 1000 person-years among regular PPI users, compared with 1.51 events per 1000 person-years for nonusers, according to the the reputable Nurse's Health Study. Is this frightening?? And why blame your doctors? Do you honestly think we make money by recommending PPI's? Maybe we recommend them because we are more familiar with critically reviewing medical literature compared with Dr. Googles and Dr. Webmd's. If I spent 1 hr reading up on how to perform a cholecystectomy, am I a surgeon? If you spend an hour reading lay press about medical issues, are you an MD? There are so many paranoid, distrustful NYT readers. **Nytimes:** [**http://well.blogs.nytimes.com/2016/02/17/heartburn-drugs-tied-to-dementia-risk/**](http://well.blogs.nytimes.com/2016/02/17/heartburn-drugs-tied-to-dementia-risk/)

**Mark Babyatsky, MD (**[**mssm.edu**](http://www.mssm.edu/)**)**

We now know that [proton pump inhibitors](http://www.everydayhealth.com/proton-pump-inhibitors/guide/), the most commonly used medications for acid reduction in heartburn, can result in bone loss and [vitamin B12 deficiency](http://www.everydayhealth.com/vitamin-b12-deficiency/guide/) when used chronically. Other acid — reducing medications appear to be associated with fewer side effects.

**Christine M. Esters (**[**adventureinwellbeing.com**](http://www.adventureinwellbeing.com/)**)**

Heartburn medication is only a bandage, a quick fix. We need to go to the root of why the body is creating this condition. A heartburn medication is a synthetic drug to stop the stomach acid, but the stomach needs acid to protect itself. So eat more fresh, organic, seasonal vegetables and fruits. Have a teaspoon of raw apple cider in a glass of water before each meal or eat a teaspoon of dry chia seeds to absorb the acid.

**Elisa Faybush, MD (**[**bannerhealth.com**](http://www.bannerhealth.com/)**)**

Proton pump inhibitors (PPIs) have an excellent long — term safety profile. Recently, there has been concern about the risk of bone fractures with this class of drug, however there is no data to confirm causation. Further research is in progress. In the meantime, I would recommend to take the minimum dose as possible of PPIs to control your symptoms and if you are at risk for [osteoporosis](http://www.everydayhealth.com/osteoporosis/guide/) make sure you are taking adequate amounts of calcium and vitamin D.

**Lisa Ganjhu, DO (**[**wehealnewyork.org**](http://www.wehealnewyork.org/)**)**

Heartburn medications have been around for many years and most people have not had major complications. The most common pills, called proton pump inhibitors, have been under a lot of scrutiny lately. There seems to be an interaction with certain cardiac medications that make the cardiac medications less effective and worsen heart disease. Also, because you need acid for digestion, using these acid — blocking medications may raise the risk to certain food — borne infections and malabsorption of certain vitamins and calcium. Malabsorption of calcium may increase the risk of hip fractures in certain populations. It is very important to understand the pros and cons of taking these medications and to take these medications only when appropriate.

**Lisa Pichney, MD (**[**stopcoloncancernow.com**](http://www.stopcoloncancernow.com/)**)**

I believe that for most patients the long — term benefits of heartburn medications outweigh the risks. That being said, as gastroenterologists we see the patients who suffer the most with heartburn and those whose heartburn causes significant other conditions. There are many different classes of medications for heartburn and even more brands in each class. For other than patient — driven over — the — counter use, a primary care provider or gastroenterologist can help counsel and direct a patient as to the proper medicine for their specific needs.

**Andrew Sable, MD (**[**gastrohealth.com**](http://www.gastrohealth.com/)**)**

At one time or another, heartburn affects almost everyone. Chronic heartburn sufferers often find themselves requiring daily medication to control their symptoms. And while there are dozens of medications that can be used effectively to treat heartburn, more recently the safety of some of these medications has been questioned. The use of PPIs (proton pump inhibitors) and H2 antagonists (histamine — 2 receptor antagonists) have in some medical studies demonstrated to increase the odds of spinal, forearm/wrist, and even hip fracture in chronic users. Additionally, the use of PPIs is associated with a significant increased risk of recurrent [C. Difficile](http://www.everydayhealth.com/c-diff/) infection in elderly patients on antibiotics. Although the risk of fractures and infections was generally reported in patients over 50, I have a discussion with all my patients on chronic [antacids](http://www.everydayhealth.com/antacids/), regardless of age, on the use of long — term PPIs and their potential risks. I also advise most to begin supplemental vitamin D and calcium which may temporize the risk of fractures and the development of osteoporosis. The use of antacids, although readily available and effective, should be discussed with your physician.

**Sutha Sachar, MD (**[**susacharmd.com**](http://www.susacharmd.com/)**)**

As with any medications, the longer you are on it, the higher your likelihood of developing a side effect from it. There are some patients with chronic heartburn, Barrett’s esophagus which is a precancerous condition, or patients with a history of ulcers who are on blood thinners who require long — term heartburn medications. In other patients, I use the shortest duration possible. I always instruct patients to supplement with calcium and vitamin D while on these medications. They are all generally safe but the class of proton pump inhibitors are usually more effective than the older histamine 2 blockers.

**Albert Snow, ND (**[**holisticgastroenterology.com**](http://www.holisticgastroenterology.com/)**)**

The problem with heartburn medications is that they don't fix anything. However they can give you temporary relief. That is where the problem lies — we are lulled to sleep, thinking that everything is okay because we don't feel any pain. The truth is that the acid is still traveling up and down the esophagus doing damage, essentially eating the flesh. This is how people end up with conditions like Barrett's Syndrome (which is [Crohn's disease](http://www.everydayhealth.com/crohns-disease/), only 14 inches higher), which is almost irreversible. So while the medication itself is not toxic the end result is; as it is "helping you" to not feel pain it is preventing you from being aware of the ongoing damage being done. The best scenario is to use these medications while you are doing something that will actually fix the problem. Heartburn, acid reflux, [GERD](http://www.everydayhealth.com/gerd/), Barrett's Syndrome are all 100 percent curable.

**AA Starpoli, MD (**[**starpoli.com**](http://www.starpoli.com/)**)**

All of the proton pump inhibitor drugs run the risk of long — term effects on calcium metabolism that may lead to osteoporosis and/or bone fracture. Additional risks include that for gastrointestinal infection,hypomagnesemia, and a variety of mineral and vitamin deficiencies as a result of the profound acid suppression. In general the medicines are safe, but we must keep in mind these potential long — term effects and consider alternative therapies such as antireflux surgery.

**Jacqueline Wolf, MD (**[**drjacquelinewolf.com**](http://www.drjacquelinewolf.com/)**)**

There are 3 types of heartburn medication: antacids such as Maalox, Mylanta, and Tums; H2 (histamine) receptor antagonists such as ranitidine (Zantac), famotidine (Pepcid), and cimetidine (Tagamet); and proton pump inhibitors (PPIs) such as omeprazole (Prilosec), pantoprazole (Protonix), lansoprazole (Prevacid), rabeprazole (Aciphex).

The antacids provide short — term relief and are safe long term if not taken in excess. The H2 receptor antagonists block much but not all of the acid and have been considered safe long term. The PPIs were initially released for only 3 months of treatment for the fear of potential cancer. No increase in cancer has been seen. However, other problems due to long term PPI therapy have occurred: low vitamin B12 levels, low magnesium levels, an increased risk for Clostridia difficile (C. diff) infection, and an increased susceptibility to some causes of food poisoning. Furthermore with high — dose, long — term use, there has been an increased risk of osteopenia and osteoporosis. A recent study reported in abstract form suggested that the people on PPIs at most risk for osteoporosis were smokers and those with low vitamin D levels. Further information is needed to clarify this issue.

http://www.everydayhealth.com/digestive-health/experts-are-heartburn-medications-safe.aspx

Consistent with some previous epidemiological studies,[[9]](javascript:newshowcontent('active','references');) but not all,[[28,29]](javascript:newshowcontent('active','references');) we found no association between smoking and BE in this study. Although a recent pooled analysis found that BE risk among ever smokers approached twofold,[[30]](javascript:newshowcontent('active','references');) given the high-level of heterogeneity between studies, the results should be interpreted with caution. Like other single-institution studies,[[9,27]](javascript:newshowcontent('active','references');) we found no evidence of a synergistic effect between smoking and GERD with regard to BE. Although GERD has been found to act synergistically with obesity and use of aspirin or NSAIDs in studies of esophageal adenocarcinoma,[[14,31]](javascript:newshowcontent('active','references');) we in this study, and others previously,[[9]](javascript:newshowcontent('active','references');) have found no evidence that these factors interact with GERD with regards to risk of BE. However, these nonsignificant findings may be because of a lack of power and warrant further investigation.

http://www.webmd.com/heartburn-gerd/news/20151027/chronic-heartburn-drugs-tied-to-higher-risk-of-kidney-disease?page=2

The kidneys might become damaged over time if patients suffer repeated bouts of acute interstitial nephritis (a form of tissue[inflammation](http://www.webmd.com/arthritis/about-inflammation)), which has been linked with short-term use of PPIs, he said.

PPIs also can cause [magnesium](http://www.webmd.com/vitamins-and-supplements/lifestyle-guide-11/supplement-guide-magnesium) levels in the blood to decline. A lack of this important mineral might also cause damage to the kidneys, Arora added.

**Question on patient info:**

Ok, I must admit that I'm getting sick of the media reporting kidney problems due to long-term PPI’s. The Kidney problems arose when a study was released this year that might, again, might indicate that PPI’s were involved in causing the kidney’s to malfunction. If anyone wants to read the study and on how many people it has been conducted then refer to this link: http://www.ncbi.nlm.nih.gov/pubmed/26752337

Now I’m trying to figure out why and how would the PPI’s cause kidney problems??? When someone mentions dementia and PPI’s or Osteoporosis and PPI’s that makes sense because of the B12, calcium absorption respectively. But I can’t come up with the kidney problem. Could a vitamin, mineral etc. cause our kidney to function improperly? If so, then OK, let’s increase the intake of these things and switch to H2 blockers for an amount of time for these things to get absorbed…

The part that I’m worried about is the organ interaction with the PPI chemistry. Is it possible and does anyone know how would the PPI’s (forget about the low stomach acid) affect our kidney due to numerous reports.

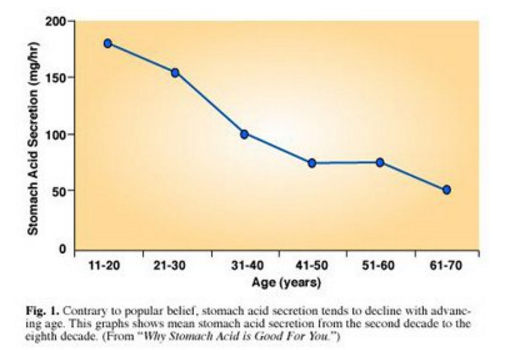
I’ m also getting sick of professionals talking about Kidney problems (YouTube, media, social networks etc.) whereas none of them specifies HOW could the PPI’S damage our kidneys, in what way, what should we do to prevent such thing if we are on PPI’s, basically, how to lower the risk of kidney failure whilst on PPI’s?. Instead of talking about how and why they are always, always talking about things that you can find out in a matter of seconds if you go and read about digestive problems.

I’ m 24 and been on PPI’s for 5 years now and will have to stay on them for the rest of my life so am worried about this things and would like to get an answer. Went for a blood test: iron, magnesium calcium are perfectly fine, went on an abdominal ultrasound, all organs are fine, went on a heart ultrasound, everything s fine. I’m on pantoprazole 40mg daily (morning 30-45 min before first meal).

By the way is 40mg pantoprazole a high dose (since you can’t get it OTC), does it leave some acid inside the stomach? (Barrett’s, gastritis, hiatal hernia which causes frequent belching and only PPI’s eliminate chest pain and stomach pain because of the GERD, gastritis).

From:

https://chriskresser.com/what-everybody-ought-to-know-but-doesnt-about-heartburn-gerd/



Reported Side Effects and Complications of Long-term Proton Pump Inhibitor Use  
DISSECTING THE EVIDENCE  
David A. Johnson; Edward C. Oldfield IV|Disclosures  
Clin Gastroenterol Hepatol. 2013;11(5):458-464.   
  
INTRODUCTION  
Proton pump inhibitors (PPIs) are medications that are ubiquitous in a gastroenterologist's practice. This class of medication has been available for commercial use for nearly 25 years and this class of acid-reduction agents has supplanted the use of histamine-2–receptor antagonists (H2RA) for patients with moderate to severe gastric acid–related diseases as well as for prophylaxis of upper gastrointestinal (GI) injury (eg, with nonsteroidal anti-inflammatory drugs). The success of these drugs, with sales totaling approximately $13.6 billion worldwide in 2009,[1] is not just a result of their potency and effectiveness in improving symptoms and complications of acid-peptic diseases. Their safety among pharmacologic agents has been unparalleled as one of the safest classes of medications that gastroenterologists deal with, however, despite this there have been emerging concerns with reports of potential adverse effects associated with use of PPIs. In the United States, such reports have led the Food and Drug Administration (FDA) to issue a number of broad-based product warnings, including all of the available PPI drugs either for prescription or over-the-counter purchase. The pathogenesis of these proposed associations is not clear in most cases and the evidence base to support a clear association for harm is extremely variable. These potential interactions have ranged from alteration of absorption of vitamins and minerals, metabolic effects on bone density, alteration of pharmacokinetics/pharmacodynamics and related drug interactions, or alterations of intended effect, infection risk, and hypersensitivity response with consequent organ damage. This review examines the proposed scientific basis for the adverse events and the evidence base surrounding these controversies, and provides the authors' bottom-line recommendations for clinical practice. Continue Reading