

## Potential Risks of Proton Pump Inhibitors For Patient

Proton pump inhibitors (PPIs) are a class of medications that reduce symptoms of heartburn and acid regurgitation. Examples: lansoprazole, omeprazole, pantoprazole.

**We are learning more about potential risks of these medications, but some risks include:**

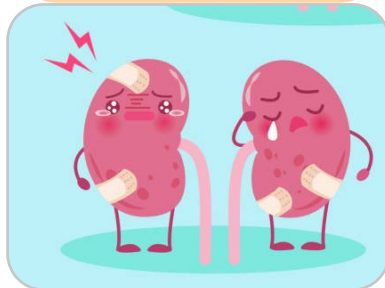
Reduced absorption of nutrients



Increased risk of breaking a bone



Sudden kidney injury or long-term kidney damage



Increased risk of infection and changes to normal gut bacteria



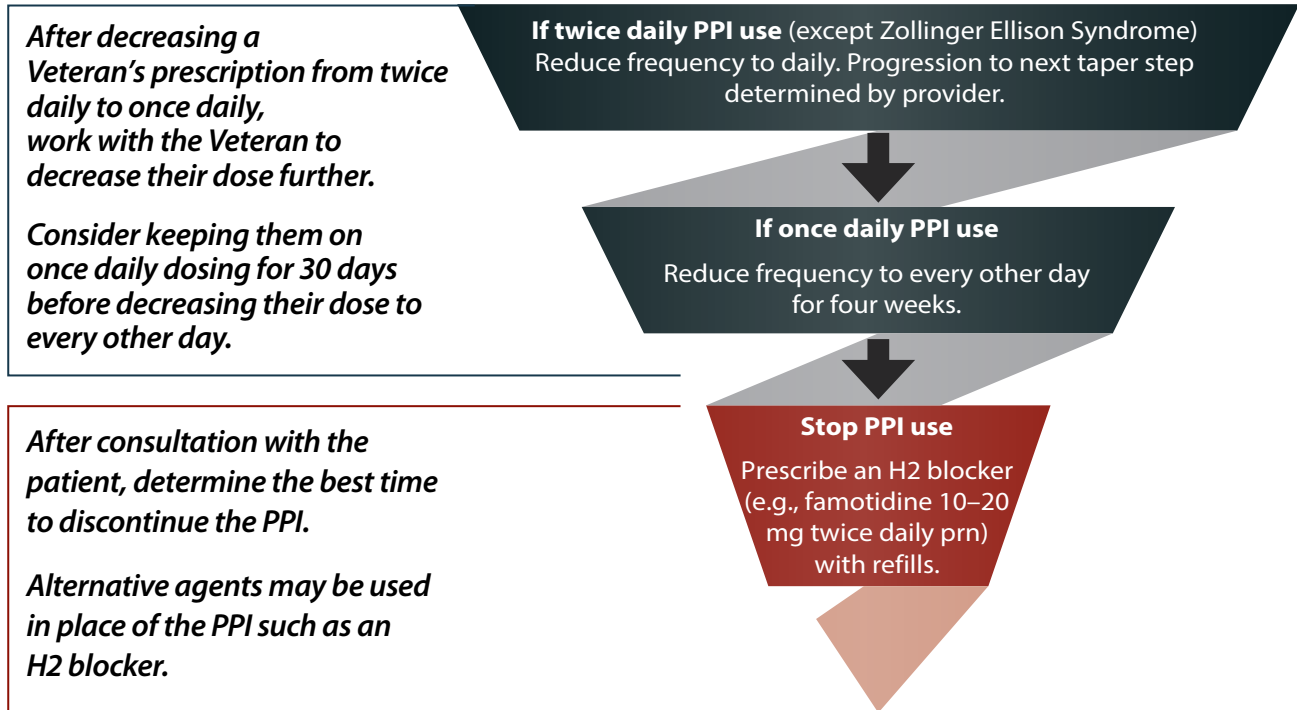
Oftentimes, we find out that patients are on these medications for longer than they need to be. When the ongoing reason for using a PPI is unclear, the risk of side effects may outweigh the chance of benefit. In many of these cases, PPIs can be successfully reduced or even stopped in some patients. For those needing occasional symptom relief, use famotidine, or antacids like Tums®, Roloids®, and others.



# For Provider

For asymptomatic patients who are eligible for tapering and discontinuation of PPIs:

- Ask about willingness to discontinue therapy
- Taper and then discontinue PPI



- Remind Veterans that their symptoms can still be treated with antacids and H2 blockers (famotidine).
- Educate Veterans that antacids and H2 blockers provide more rapid resolution of symptoms than PPIs, which are also available over the counter.

Drug	Brand	Dose	Time to symptom relief
Famotidine	Pepcid®	10–20 mg twice daily as needed for stomach and symptoms	30–60 minutes
Calcium carbonate, Magnesium hydroxide, and Aluminum hydroxide	Tums®, Roloids®, Gaviscon®, Mylanta®	Take as prescribed on over-the-counter labels, as needed for stomach and symptoms	5–20 minutes

- Review lifestyle interventions
  - Lose weight, if overweight
  - Elevate the head of the bed, for nocturnal symptoms
  - Avoid going to bed within 2–3 hours of eating, especially after meals
  - Eliminate any food triggers, such as caffeine, spicy foods, carbonated beverages
  - Avoid alcohol and tobacco
- Establish a plan for Veterans to call if any red flag symptoms, such as blood in stool or hematemesis, or symptoms that are not resolving with antacids or H2 blockers.
- Follow-up and manage recurrent gastroesophageal symptoms as clinically indicated.