Proton-Pump Inhibitor (PPI) Use

The FDA has issued multiple warnings on the long-term use of PPIs. These include: increased risk of *C. difficile* infection[1], hypomagnesemia[2], and fractures of the hip, wrist, and spine[3]. Therefore, prudent prescribing of PPIs is warranted. The FDA recommends use of the lowest dose and shortest duration of PPI therapy appropriate for the condition being treated[1-3]. Patient compliance, time of administration (prior to meals), and dietary indiscretions (i.e. alcohol or irritating foods) should be assessed prior to titration of PPI doses.

Indication	Treatment	Duration
Gastroesophageal reflux disease (GERD)[6] Symptomatic relief Acute healing of erosive or ulcerative esophagitis Maintenance healing of erosive or ulcerative esophagitis	Omeprazole 20 mg PO once daily **OR** Pantoprazole 40mg PO once daily	Initial 8 week course for symptom relief or esophagitis Maintenance therapy determined by response and severity of disease For patients that require more long-term therapy, consider a trial of a lower dose, on-demand therapy, or intermittent therapy to minimize exposure
Stress ulcer prophylaxis Reserve PPIs for critically ill patients *with increased risk of bleeding*:[4,5] At least one of the following: - Coagulopathy (platelet count <50,000 mm^3, INR >1.5, or aPTT >2x control) - Mechanical ventilation >48 hours - History of GI ulceration or bleeding within past year - Glasgow Coma score ≤10 - Traumatic, severe thermal or spinal cord injury - Hepatic failure Two or more minor risk factors: - Sepsis - ICU stay ≥1 week - Occult GI bleeding ≥6 days - High-dose corticosteroids (≥250 mg/day hydrocortisone equivalent)	Omeprazole 20-40 mg once daily **OR** Pantoprazole 40mg IV/PO once daily	Transition to PO when possible Continue until resolution of underlying risk factors and/or critical illness Recommend discontinuation at discharge, unless there is another indication for use

aPTT= activated partial thromboplastin time; GERD= Gastroesophageal reflux disease; GI= Gastrointestinal; ICU= intensive care unit; INR= International normalized ratio; IV= intravenous; PO= by mouth; PPI= proton pump inhibitor

References

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