



Interaction of Esomeprazole in Gastroesophageal Reflux Disease (GERD) Patients and its Medical Uses

Xiaoli Zhang*

Department of Pharmacology, Northwest University, Shaanxi, China

ARTICLE HISTORY

Received: 24-Aug-2022, Manuscript No. AJPBP-22- 72695;

Editor assigned: 29-Aug-2022, PreQC No. AJPBP-22- 72695 (PQ);

Reviewed: 12-Sep-2022, QC No AJPBP-22- 72695;

Revised: 19-Sep-2022, Manuscript No. AJPBP-22- 72695 (R);

Published: 26- Sep-2022

Description

Esomeprazole is an acid-suppressing medication that may be used to treat illnesses including Gastroesophageal Reflux Disease (GERD) and stomach ulcers that are brought on by an excessive production of stomach acid. By permanently inhibiting the activity of the acid-producing enzyme, esomeprazole lowers stomach acid production also known as the gastric proton pump. The parietal cells of the stomach wall house the proton pump. Gastric acid secretion at rest and secretion induced by stimuli are both impacted. Esomeprazole is a member of the Proton Pump Inhibitors group of medications (PPIs). Damaged tissue in the oesophagus, stomach, and duodenum can repair with esomeprazole.

Esomeprazole is prescribed for the long-term treatment of pathological hypersecretory conditions like Zollinger-Ellison Syndrome as well as acid-reflux disorders such as the healing and maintenance of erosive esophagitis, symptomatic Gastroesophageal Reflux Disease (GERD), peptic ulcer disease, and eradication. Some stomach and esophageal issues are treated with esomeprazole are such as acid reflux, ulcers. It functions by lessening the acid your stomach produces. It alleviates problems like heartburn, swallowing issues, and a chronic cough. This drug aids in the repair of esophageal and stomach ulcers and helps prevent stomach and esophageal cancer. Esomeprazole is a member of the proton pump inhibitors pharmacological class. Esomeprazole is primarily used to treat gastroesophageal reflux disease, erosive esophagitis, Peptic ulcer disease, are involved by duodenal ulcers, gastric ulcer prevention in people taking long-term NSAID therapy, and Crohn's disease-related gastrointestinal ulcers. The medical uses of Esomeprazole are Gastroesophageal reflux disease and Peptic ulcer disease.

Gastroesophageal reflux disease

Gastroesophageal Reflux Disease (GERD) is a disorder that occurs when the stomach's digestive acid comes into contact with the oesophagus. Heartburn is the name for the discomfort this condition causes. The oesophagus may become permanently damaged if gastric acids are exposed to it over an extended period of time. Digestive acid production is decreased by esomeprazole, which lessens the impact of these acids on the oesophagus.

Peptic ulcer disease

Peptic ulcer known as a duodenal ulcer appears in the first section of the small intestine (duodenum). The lower portion of your oesophagus is where an esophageal ulcer develops. Open sores known as peptic ulcers form on the inner lining of the stomach and the upper small intestine. A rupture in the inner lining of the stomach, the first section of the small intestine, or occasionally the lower oesophagus characterises are included by Peptic Ulcer Disease (PUD). A duodenal ulcer is found in the first part of the intestine, whereas a gastric ulcer is found in the stomach. Upper abdomen discomfort worsens with eating and upper abdominal pain that wakes you up in the middle of the night which is the most typical sign of a duodenal ulcer.

The pharmacokinetics of esomeprazole is involved by time and dose dependence. There was a good correlation between AUC and effect for esomeprazole. This data suggests an increased acid inhibitory effect of esomeprazole compared to omeprazole. Regardless of the initial severity of the condition, the findings of this study shows that esomeprazole offers a considerable benefit over omeprazole in terms of esophageal repair and heartburn treatment in GERD patients with erosive esophagitis.