PHARMACOLOGICAL PRINCIPLES GOVERNING THE USE OF PROTON PLIMP INHIBITORS: TAILORING THERAPY TO IMPROVE GERD OUTCOMES

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Preface

M. Michael Wolfe

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Living with Chronic Heartburn: Insights Into Its Debilitating Effects

Denis McCarthy

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Heartburn is a common, often disabling condition that in many cases is the principal symptom of an underlying disease called gastroesophageal reflux disease (GERD). This article presents an overview of GERD's impact on quality of life, and pathophysiologic consequences. An understanding of these issues is essential for effective management of this condition. It is emphasized that few patients obtain complete satisfactory relief of their symptoms without the simultaneous implementation of significant lifestyle modifications and appropriate pharmacologic interwention. Adequate acid-suppressing medication should be included for relief of extraesophageal manifestations of GERD, which are often the most troublesome for patients to deal with and a major source of complaints.

The Role of Acid Suppression in the Management and Prevention of Gastrointestinal Hemorrhage Associated With Gastroduodenal Ulcers

Joseph J.Y. Sung

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Acid suppression is proposed to play a role in the overall management of peptic ulcer hemorrhage and in prophylaxis against stress ulcers. In patients with peptic ulcer bleeding, histamine₂-receptor antagonists (H_2RAs) have been used widely, although their usefulness has come into question. Recent clinical trials support proton pump inhibitor (PPI) therapy as an effective means of lowering the risk of subsequent rebleeding, reducing the length of hospitalization,

decreasing the need for transfusions and surgery, and reducing medical costs in patients with peptic ulcer hemorrhage. Similarly, comparative data support PPIs over H_2RAs for raising pH in models of stress ulcer prophylaxis, although the clinical body of literature is not as well established. This article discusses the theoretical and clinical evidence supporting acid suppression in critically ill patients.

Pharmacologic Features of Proton Pump Inhibitors and Their Potential Relevance to Clinical Practice Lynda S. Welage

S25

Proton pump inhibitors (PPIs) (omeprazole [Prilosec], lansoprazole [Prevacid], rabeprazole [Aciphex], pantoprazole [Protonix], and esomeprazole [Nexium]) are the most potent acid suppressant agents available in the United States and have, therefore, become the drugs of choice for most acid peptic diseases. There are, however, subtle differences among them with regards to the pharmacologic profiles. For example, PPIs differ slightly in their pharmacokinetic and pharmacodynamic properties and their propensity to interact with other medications. A better understanding of these properties can help the clinician optimize PPI therapy.

Managing Gastroesophageal Reflux Disease: From Pharmacology to the Clinical Arena M. Michael Wolfe

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Gastroesophageal reflux disease (GERD) is a condition that affects patients throughout the day and should be managed with appropriate therapy based on the frequency and severity of symptoms. Proton pump inhibitors (PPIs) such as omeprazole, esomeprazole, lansoprazole, pantoprazole, and rabeprazole, are the most effective therapeutic options for managing GERD because they potently inhibit gastric acid secretion. Armed with a thorough understanding of the physiology of acid secretion and the pharmacologic properties of PPIs, clinicians can take simple steps to optimize therapy for their GERD patients.

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