



REVIEW

Peptic Ulcer Disease: An Overview of Aetiology, Pathophysiology, Clinical Presentation, Diagnosis and Treatment Options

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ABSTRACT

Introduction: Peptic ulcer disease (PUD) is endemic in all parts of the world. It is estimated that as high as 5-10% of the world's population is affected by PUD. Disruption in the gastric protective factors within the gastrointestinal lumen is responsible for the development of PUD. Aggravating factors that promote formation of peptic ulcers include gastric acids, decreased bicarbonate and general decrease in mucosal defences. Non-steroidal anti-inflammatory drugs (NSAIDs) and *Helicobacter pylori* (*H. pylori*) infection are the two major aetiologic factors contributing to damages to the mucosal defence. The major clinical symptom of PUD is epigastric pain. Others includes bloating, heartburn, nausea or vomiting. Testing for *H. pylori* is important in treatment of PUD. The major complications of *H. pylori*-associated and NSAID-induced ulcers include upper gastrointestinal bleeding, perforation, penetration, gastric outlet obstruction and gastric adenocarcinoma.

Purpose: The purpose of this review is to present a general overview of the aetiology, pathophysiology, clinical presentation, diagnosis and treatment options for peptic ulcer disease (PUD).

Conclusion: PUD remains a global health challenge requiring that all patients should be treated. Conventional treatments include gastric acid suppressing agents such as proton pump inhibitors (PPIs) and histamine-2 (H₂) receptor antagonists as well as mucosal protective agents. Eradication of *H. Pylori* is critical in pharmacotherapy of *H. pylori* associate PUD. New approaches to treatments may include the use of antioxidants containing medicinal plants.

Keywords: Peptic Ulcer, *Helicobacter pylori* (*H. pylori*), Non-steroidal anti-inflammatory drugs (NSAIDs), Proton Pump Inhibitors (PPIs), Antioxidants, Herbal Medicine