



Proton pump inhibitors: Over-the-counter management of acid reflux

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Introduction

Gastrointestinal symptoms related to gastric acid reflux are an increasingly common complaint experienced by the general population. In addition, more and more patients visit their pharmacy for advice and treatment to alleviate these unpleasant symptoms. Proton pump inhibitors (PPIs) are an effective treatment option and are available over-the-counter (OTC). The pharmacist's assistant is in the ideal position to provide advice on the appropriate use of OTC PPIs in the self-care setting.

Acid reflux

The gastrointestinal tract (GIT) consists of the oesophagus, stomach, the small intestine and the colon, which make up the digestive system of the body. The stomach plays a key role in digestion as it produces gastric acid (stomach acid), essential for digestion.

Gastric hyperacidity, also referred to as acid dyspepsia, occurs when an excessive amount of gastric acid is produced by the stomach. This is often a contributing factor in digestive disorders such as gastro-oesophageal reflux disease (GORD), indigestion, nausea, bloating and flatulence (wind). GORD, also known as acid reflux, occurs when contents in the stomach flow back into the oesophagus and/or mouth, resulting in unpleasant symptoms of heartburn and acid regurgitation. Heartburn is a burning sensation felt behind the

breast bone. It is regarded as the most obvious symptom of GORD and occurs when stomach contents irritate the normal lining of the oesophagus during reflux. Acid regurgitation occurs when the contents of the stomach reach the mouth during reflux, leaving an acidic taste in the mouth.

Proton pump inhibitors (PPIs)

While there is a range of OTC medicines available to treat symptoms of acid reflux such as antacids, alginates and histamine-2 blockers, PPIs have been found to be the most effective. This is due to their mode of action by blocking the final step of gastric acid secretion, and therefore enabling them to offer the most powerful way of suppressing acid production in the stomach.

How do PPIs work?

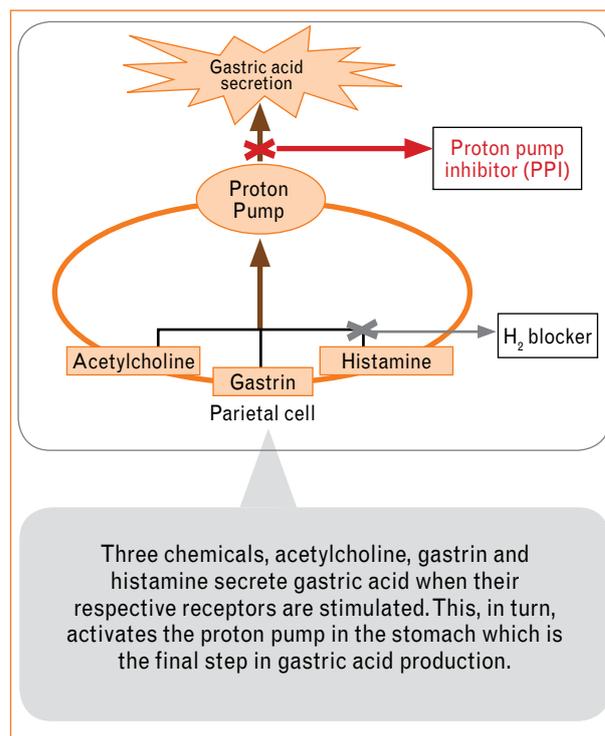


Table I. Currently available OTC PPIs in South Africa

Active ingredient	Strength	Indication	Maximum treatment duration
Lansoprazole	15 mg	Short-term relief of heartburn, hyperacidity, acid dyspepsia or gastric acid reflux symptoms	14 days
Pantoprazole	20 mg		
Omeprazole	10 mg		

The effectiveness of the PPI is dependent on the time it is taken in relation to the meal.

Administration

PPIs are effective when the proton pump in the stomach is active, i.e. after a meal. Therefore, the timing of the dose is crucial to ensure the maximum benefit of treatment. PPIs should be taken once-daily, 30–45 minutes before a meal to ensure the maximum concentration of the PPI at the time of the meal. PPIs should ideally be taken before breakfast or before the first meal of the day.

Safety

PPIs are well-tolerated. However, PPIs should only be used when appropriate and for the shortest duration of time to achieve relief of symptoms. Long-term use should only be considered under supervision of a doctor. Due to differences in the metabolism of these medicines, there is potential for drug interactions. Therefore, patients using other medicines should be referred to the pharmacist or doctor to assess for any potential interaction which may compromise safety and/or efficacy of the medicines taken concomitantly.

When to refer

Patients should be referred to their doctor in the event of:

- symptoms such as weight loss, difficulty swallowing or internal bleeding in addition to heartburn and/or acid regurgitation developing
- symptoms persisting after lifestyle changes have been made; these may include, but not be limited to, weight management, avoiding “trigger” foods, eating at least three hours before bedtime
- OTC PPIs being used regularly for more than two weeks, but symptoms still persisting or returning when PPI treatment is stopped

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