

## **MINUTE FOR HEALTH - GASTRO-ESOPHAGEAL REFLUX DISEASE**

Gastroesophageal reflux disease (GERD), also known as reflux esophagitis, chronic heartburn and dyspepsia, affects the esophagus, the biologic tube that carries food and drink from the mouth to the stomach. The disease is characterized by the abnormal flow and presence of stomach acid within the esophagus, and the condition results in irritation, ulceration, and in severe cases, neoplastic transformation in the lining of the esophagus. In the process of normal digestion, the stomach uses strong acids and enzymes to break down food, and confines the caustic mixture within the acid-resistant stomach walls through contraction of the lower esophageal sphincter (LES). In GERD, the LES fails to close during digestion as required.

Approximately 60% of the US population experiences signs or symptoms of GERD at least once a year, and close to 30% experiences signs or symptoms of GERD weekly. For all patients with GERD, signs and symptoms often subside quickly using medication or other treatment. However, if GERD is untreated for an extended period of time, a more serious condition of chronic esophagitis, an inflamed state in which refluxed stomach acid can damage the esophageal lining and cause bleeding or ulcers, may occur. In addition, scarring from damaged esophageal tissue can narrow the esophageal passage and form strictures that makes swallowing difficult. In rare cases, GERD can result in a more serious condition called Barrett's Esophagitis, in which the cells of the esophageal lining undergo neoplastic transformation and increase significantly the risk for developing esophageal cancer. It is for this reason that understanding and early recognition of the signs and symptoms of GERD is essential to maintain good health.

There are many causes of GERD. Structural causes include the presence of a hiatal hernia, a condition in which part of the stomach protrudes upward into the chest, and a weakened or incompetent LES. Biochemical causes of GERD include intake of caffeine (coffee, tea, chocolate, and certain sodas), nicotine (tobacco products), spicy or acidic foods, and fatty foods. Physical causes of GERD include repletion (having a stomach full of food), gastroparesis (delayed emptying of stomach contents), obesity and pregnancy. Signs and symptoms of GERD vary greatly, and include, among others, heartburn, regurgitation, hoarseness (which may arise when stomach acid irritates the throat or larynx), dysphagia (difficulty swallowing), dental erosion, and persistent cough. The signs and symptoms may be temporary, and may resolve spontaneously within hours. However, if they persist over a period of weeks, evaluation by your physician and establishing a comprehensive treatment plan is certainly appropriate.

The diagnosis of GERD is most often clinical, and requires no specific testing. However, in severe cases of GERD that fail to respond to initial treatment, radiographic analysis or esophagogastroduodenoscopy (EGD) may be necessary to confirm the diagnosis. Treatment of GERD which occurs episodically and infrequently includes the use of over-the-counter antacid medications and lifestyle changes to avoid intake of offending foods and chemicals. However, treatment of GERD which occurs routinely and frequently requires a comprehensive and multifaceted approach to relieve signs and symptoms and minimize the risk of developing esophageal cancer. Patients who experience GERD routinely should modify their lifestyle and food and chemical intake accordingly, and consider taking, among other medications, proton pump inhibitors (PPIs) to reduce production of stomach acid. Remember, occasional signs or symptoms of GERD is normal. However, should signs and symptoms occur 3 or more times per week, evaluation and treatment of GERD is necessary.

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