Title: Gastroesophageal Reflux Disease

Author: Phillip Suwan

Date: March 5, 2008

Key words: Gastroesophageal reflux, GERD, heartburn, dyspepsia

Abstract:
Gastroesophageal disease (GERD), or heartburn, is a common disorder that afflicts millions. Symptoms include nighttime cough, a burning sensation in the chest, and pain with swallowing. There are a number of treatments available for GERD ranging from lifestyle alterations to prescription medications. Herein, the mechanisms underlying GERD along with its symptoms and treatment are described.

This document was created by a medical student enrolled in the Primary Care Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.
**What is GERD?**
Normally, the food we eat travels from the mouth and through a tube called the esophagus before entering the stomach. GERD, also known as heartburn, is a condition in which partially digested food along with other stomach contents back up, or reflux, into the esophagus. This can lead to many symptoms that will be discussed. Interestingly, despite being called “heart burn”, the heart is not involved in this disease.

**What causes GERD?**
GERD often occurs when a tight band of muscle at the lower end of the esophagus does not work properly. This muscle, the lower esophageal sphincter (LES), ensures that stomach contents do not reflux into the esophagus. Normally the LES closes shortly after a person swallows food. In GERD, the LES does not work properly and stomach contents enter the esophagus and cause irritation.

**Can children get GERD?**
Yes, GERD can affect people of all ages. Suspect GERD in children with a cough that is worse at night, hoarseness, frequent spitting up, or irritability and discomfort with eating.

**What are the symptoms of GERD?**
- An uncomfortable, burning sensation in the chest. This is often following a meal or after lying down.
- Sour taste in the mouth - especially in the morning or after meals.
- Persistent, dry cough that does not go away.
- Pain with swallowing.
- Worsening of symptoms with spicy or fatty foods.

**I think I may have GERD. What next?**
Make an appointment with your doctor to determine if you have GERD. If so, your doctor can help you develop a treatment plan.
What are my treatment options?
While there is no cure for GERD, there are many steps that can be taken to manage the associated discomfort and prevent long-term complications.

Lifestyle Changes
- Avoid alcohol, chocolate, tea, caffeinated beverages, spicy or fatty foods as these may all cause reflux.
- Quit smoking.
- Eat smaller meals and avoid heavy meals within 2-3 hrs of sleeping.
- Elevate the head of your bed.
- Weight loss.

Medications
There are a variety of medications that will neutralize stomach acid (antacids) or block the production of stomach acid (proton pump inhibitors). If lifestyle modifications are not working for you, your doctor may prescribe you medications to manage your reflux.

Surgery
In a small number of cases, surgery is required to alleviate GERD.

For more information:
- American Academy of Family Physicians – www.aafp.org and search ‘GERD’
- The Cleveland Clinic - http://www.clevelandclinic.org/ and search ‘GERD’

Phillip Suwan
University of Minnesota Medical School