



## GERD/HIATAL HERNIA TESTING

Dr. Reising will help confirm your diagnosis through a series of questions about your symptoms and specific tests of your esophagus and stomach. These tests are critical to make sure you have GERD, to help to rule out the possibility of other diagnosis' that can mimic the symptoms of GERD and for surgical planning. These tests for GERD and hiatal hernia include barium swallow, esophageal manometry and endoscopy of the esophagus, stomach, and duodenum also called (esophagogastroduodenoscopy or **EGD**).

### Barium swallow

Barium swallows are performed in the hospital radiology department. A radiologist and radiology technician will help you swallow a liquid barium solution while they record an X-ray video to observe the flow of the fluid through the esophagus into the stomach. This test can assist in determining esophageal length, presence or absence of a hiatal hernia and also assess esophageal function and emptying, all important information for surgical planning. This test usually takes 15-20 minutes to perform.

### Esophageal manometry

Manometry is an essential test that measures the pressures inside the esophagus and establishes how well the esophagus muscles contract to move food into the stomach. It also measures the resting pressure of the valve at the bottom of the esophagus called the lower esophageal sphincter (LES). When the pressure in this sphincter is too low it can allow reflux of stomach acid into the esophagus which causes the heartburn sensation. Chronic acid exposure to the esophagus can lead to esophageal injury called esophagitis, changes in the tissue called Barrett's esophagus and sometimes esophagus cancer. Manometry can also rule out a disease called achalasia which can mimic the symptoms of GERD but has an entirely different surgical treatment.

During this test a small catheter (thin tube) is inserted through the nose, and you will be instructed to swallow several times. The probe measures muscle contractions in different parts of the esophagus during the act of swallowing. This test usually takes 20-30 minutes to perform.

### Upper Endoscopy (EGD)

An upper endoscopy (EGD) is a very safe procedure that Dr. Reising or one of his colleagues may perform to evaluate the:

1. **lining** of your esophagus, to make sure there is not a cancer present, precancerous changes or an esophageal stricture. Biopsies of esophagus tissue can be performed through the scope if necessary at the time of your procedure
2. **length** of your esophagus to make sure there is adequate length for a wrap procedure. Sometimes with chronic GERD and hiatal hernia the esophagus can become shortened
3. **stomach** for ulcers and stomach outlet problems
4. **acid** exposure to your lower esophagus from the stomach by placing a 24 hour, pH probe

Dr. Reising will perform this procedure in a surgery center where you will be given medications through an IV that help you completely relax and nearly fall asleep, (conscious sedation). These medications may also cause you to have no memory of the procedure, in most cases. This procedure usually takes 15 minutes to perform and an additional 45 minutes to recover from the sedation.