Esophageal Impedance-pH Monitoring

What is an esophageal impedance-pH study?

An ambulatory esophageal 24 hour pH study is an outpatient test that measures the amount of acid or non-acid reflux of stomach contents into the esophagus. The sensors placed in the esophagus measure acid concentration which corresponds to acidic reflux and impedance which corresponds to nonacid reflux. You will wear a data recorder during the test and record symptomatic episodes. Symptoms will be analyzed for any correlation to episodes of reflux.

Why is esophageal impedance-pH study performed?

Esophageal impedance-pH studies measure the amount of reflux that occurs in a typical 24 hour period. By analyzing episodes of reflux with associated symptoms this tests helps your doctor determine if your symptoms are due to gastroesophageal reflux disease. This is an important part of the pre-operative evaluation for gastroesophageal reflux surgery.

What preparation is required?

An empty stomach allows for the best and safest examination. Therefore, you should have nothing to eat or drink for four hours before your procedure. If you have any questions about dietary recommendations, please call our endoscopy center at 505-925-6000.

Can I take my current medications?

Most medications can be continued as usual. Tell your doctor about your medications and your allergies. If there are any medications that you are not sure about taking, please consult your doctor beforehand or call our endoscopy center at 505-925-6000.

What happens during an esophageal impedance-pH study?

Esophageal impedance-pH study is a well-tolerated outpatient procedure. You should wear comfortable loose-fitting clothing to the Center for Digestive Disease. A trained nurse experienced in placement of esophageal impedance-pH probes will place a numbing gel in your nostril before the procedure. The nurse will then gently insert a thin flexible tube into the nostril
and advance the tube into the esophagus. Measurements of the pressures in your esophagus will be made in order to map out the exact location to place the impedance-pH probe. This tube will be withdrawn and a very thin and flexible tube will be inserted into the nostril and advanced into an exact location in your esophagus. The tube will be discretely secured to your nostril and connected to a data recorder that you will carry on a strap and wear overnight. The procedure itself usually takes approximately 30 minutes, although you should plan to be at our endoscopy center for approximately one hour. This will include the registration, preparation and procedure.

**What happens after esophageal impedance-pH study?**

You will be able to drive yourself home after placement of the esophageal impedance-pH probe. Esophageal pH and impedance data will be collected and stored on the data recorder. The following day you will return to the Center for Digestive Disease and an experienced nurse will carefully remove the esophageal probe and collect the data recorder. The information will be analyzed and reviewed by a doctor. It may take up to two weeks for your doctor to interpret the information and contact you with results.

**What are possible complications of esophageal impedance-pH study?**

Esophageal impedance-pH study is very safe when performed by trained and experienced staff. Complications are rare. Patients may have nasal irritation during or after the procedure.