

# PH Impedance Test

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 catheter placed in the esophagus measures 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 happens during an esophageal impedance-pH study?**

Esophageal impedance-pH study is a well-tolerated outpatient procedure. You should wear comfortable loose-fitting clothing .A trained nurse experienced in placement of esophageal impedance-pH catheter will place a numbing gel in your nostril before the procedure. The nurse will then gently insert a thin flexible catheter into the nostril and advance the catheter 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 This catheter will be withdrawn and a very thin and flexible catheter will be inserted into the nostril and advanced into an exact location in your esophagus. The catheter will be discretely secured to your nostril and connected to a data recorder that you will carry on a strap and wear overnight.

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

You will be able to drive yourself home after placement of the esophageal impedance-pH catheter. Esophageal pH and impedance data will be collected and stored on the data recorder. The following day you will return and an experienced nurse will carefully remove the esophageal catheter 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.

# PH Impedance Test Instructions

## Before the procedure:

- If you are taking PPIs, such as Prilosec, Nexium, Prevacid, Aciphex, etc., discontinue use 7 – 10 days before the test or as instructed by your physician.
- If you take H2 Blockers, such as Pepcid, Zantac, or Tagamet, discontinue the medications 3 days prior to the test.
- If you take antacids, such as Tums, Mylanta, Maalox, Rolaids, etc., discontinue use 24 hours prior to the PH Impedance test.
- You may have your regular meals on the day before the test
- Do not eat or drink anything after midnight. This also includes chewing gum, mints and hard candies. If you are scheduled for an afternoon appointment, you may have clear liquids up until 6 hours before your appointment.
- No smoking
- You may take certain necessary medications (Heart, blood Pressure and Seizure) with a small sip of water 2 – 4 hours before the test. Please check with your doctor regarding any medications you take.
- Wear a shirt or blouse that buttons in front on the day of the PH Test so you will not have to remove clothing over your head after the catheter has been placed.
- You may wish to shower or take a tub bath before your appointment since you will be unable to do so for 24 hours during the test.
- Please inform the nurse upon arrival if you are diabetic. Follow your doctor's instructions regarding insulin dosage and when to take your pills for diabetes.
- You will be asked to sign an informed consent and provide information regarding allergies, medicines you are now taking, existing medical conditions, and previous surgeries.

## During the procedure:

- An esophageal motility test may be performed before the placement of the PH Impedance catheter to measure the pressures of the esophagus and determine proper placement for the PH Impedance catheter.
- Your nostrils will be numbed with an anesthetic gel to allow for easier placement of the catheter. The back of your throat may also be sprayed with a numbing medicine.
- The PH Impedance catheter will be inserted through your nostril into your esophagus, secured in place with tape and connected to a recording device. The test lasts for 24 hours.
- During the 24 hours, you will be asked to keep a diary to write down when you eat, lay down, take medications, and when you have symptoms such as heartburn, chest pain, cough, etc. It is important to keep an accurate diary.
- Eat the foods you normally consume during the test.
- You may drink any beverage with meals, but drink only water between meals.
- Do not chew gum or eat hard candies or mints during the test.
- Do not take a tub bath or shower during the test.
- After 24 hours, you will return to the endoscopy center. Remember to bring your diary with you.
- A nurse will remove the catheter and review the diary with you
- If you experience any difficulties during the test, please contact the Digestive and Liver Disease clinic at 214-645-0595.