



**INDIANA UNIVERSITY HEALTH**

GI MOTILITY LAB

&

GASTRIC ELECTRICAL STIMULATION PROGRAM

**24 HOUR PH-IMPEDENCE MONITORING**

**24 HOUR PH-IMPEDENCE MONITORING** - Your physician has ordered this test, which is used to evaluate for gastroesophageal reflux disease and to determine the effectiveness of medications that prevent acid reflux. This test measures the amount of acid refluxing or backing up from the stomach into the esophagus (food pipe).

**There are 2 ways to do the test:**

1. ***IF your physician wants you TO STOP the medications for treating acid reflux:***

- a.*** These medications should be ***stopped for 1 week prior*** to the test. These include Prilosec (omeprazole), Nexium (esomeprazole), Aciphex (rabeprazole), Prevacid (lansoprazole), Protonix (pantoprazole), Zegerid (immediate release omeprazole), and Dexilant (dexlansoprazole).
- b.*** Some medications need to be ***stopped for 2 days before*** the test. Examples of these medicines are: Zantac (Ranitidine), Tagamet (Cimetidine), Axid (Nizatidine), Pepcid (Famotidine).

**OR**

2. ***IF your physician wants you TO CONTINUE these medications to determine how effective they are in suppressing acid production, then continue them at your regular time of the day prior to the test and the morning of the test with a small sip of water.***

**Other Instructions**

1. **Do not eat or drink for 6 hours prior to your test.**
2. ***Please complete the enclosed form. Bring all up-to-date insurance information and identification to your appointment, as well as complete names, addresses, phone and fax of all doctors you want to receive a copy of the report.*** We recommend you contact your insurance company prior to your procedure, if you have any questions about coverage.

3. **PLEASE ARRIVE 30 MINUTES PRIOR TO YOUR SCHEDULED PROCEDURE TIME.**
  - a. Check-in at the Front Admitting Area located on the first floor of University Hospital, 550 N. University Blvd, Indianapolis Indiana.
  - b. Once registration is completed, the registration clerk will notify the Motility Clinic of your arrival. Proceed to the Central Elevators.
  - c. Take them to the 5<sup>th</sup> floor, (5601) and wait in the chairs immediately to the left of the elevators. The motility nurses will escort you to the Motility Lab.
  - d. Please use valet parking, which is available under the glass canopy

#### **Why am I having this test?**

Esophageal pH monitoring is used in several situations to assess for gastroesophageal reflux disease (GERD). The first is to evaluate typical symptoms of GERD such as heartburn and regurgitation that do not respond to treatment with medications. In this situation, there may be question whether the patient has gastroesophageal reflux disease or whether anti-acid medications are adequate to suppress the acid production. The second is when there are atypical symptoms of GERD such as chest pain, coughing, wheezing, hoarseness, sore throat. In this situation, it is not clear if the symptoms are due to gastroesophageal reflux. Occasionally, this test can be used to monitor the effectiveness of medications used to treat GERD. The test is often used as part of a pre-operative evaluation before surgery.

#### **What does the procedure involve?**

The nose is numbed for a short time. A thin wire-sized catheter is passed into one nostril, down the back of the throat, and into the esophagus as the patient swallows. The tip of the catheter contains a sensor that senses acid. The sensor is positioned in the esophagus so that it is just above the lower esophageal sphincter, a specialized area of esophageal muscle that lies at the junction of the esophagus and stomach and prevents acid from refluxing back up into the esophagus. Sometimes the probe has other pH sensors to measure pH in the stomach and to measure pH in the upper esophagus and non-acid reflux using special sensors (impedance sensors). These extra sensors do not change the size of the small catheter.

Placing the probe takes approximately 10 minutes. No sedation is necessary. The other end of the small catheter comes out the nose and is connected to a small battery-powered recorder that is worn on a strap over the shoulder. The patient is sent home with the catheter and recorder in place. During the 24 hours that the catheter is in place, the patient goes about his/her usual activities, for example, eating, sleeping, and working. Meals, periods of sleep, and symptoms are recorded by the patient in a diary and by pushing buttons on the recorder. The diary helps the doctor to interpret the results. The patient returns the next morning for removal of the catheter. After the catheter is removed, the recorder is attached to a computer so that the data recorded can be downloaded into the computer where it is then analyzed. **Please note that you cannot mail the equipment back to the lab. The equipment must be returned the next day to complete your study.**

There are very few side effects of esophageal pH monitoring. There may be mild discomfort in the back of the throat while the catheter is in place. The vast majority of patients have no difficulty eating, sleeping, or going about their daily activities. Most patients, however, prefer not to go to work because they feel self-conscious about the catheter protruding from their nose.

**\*\*If you should have any questions regarding your medications please contact your prescribing doctor. If you need to change your appointment for this test, please contact the Motility Lab scheduler 317-944-7817. If you have any specific questions regarding the test, please contact the Motility Lab at 317-948-8137.**