



INDIANA UNIVERSITY HEALTH

GI MOTILITY LAB

&

GASTRIC ELECTRICAL STIMULATION PROGRAM

BRAVO 48-HOUR PH MONITORING

BRAVO 48-HOUR PH MONITORING (Wireless, capsule esophageal pH monitoring) - This is a test 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 Prepare for this test:

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

1. ***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 at least 8 hours prior to your test.**
2. ***Please complete the enclosed forms and bring a list of all medications. 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 5th 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?

Bravo 48-hour 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 a 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 anti-reflux surgery.

What does the procedure involve?

This test uses a wireless capsule that is attached to the esophageal lining. The capsule is approximately the size of an eraser on a pencil. The capsule contains an acid sensing probe, a battery, and a transmitter. You may require an upper endoscopy using conscious sedation to place the catheter, based on information obtained from your referring physician prior to your study date.

The capsule is introduced into the esophagus on a catheter through the mouth and is attached to the lining of the esophagus with a clip. The catheter then is detached from the capsule and removed. The probe monitors the acid in the esophagus and transmits the information to a recorder that is worn by the patient on a belt. With this method, there is no catheter protruding from the nose for the recording. For this test, the monitoring period is longer, 48 hours (2days), which allows more symptom events to be captured. During the recording, the patient goes about his or 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 will return 48 hours after placement . (Please note that you cannot mail the equipment back to the lab. The equipment must be returned at the end of 48 hours). The recorder is then attached to a computer so that the data recorded can be downloaded into the computer where it is then analyzed.

The capsule will eventually fall off the esophageal lining, usually after five to several days, and is passed in the stool. The capsule is not reusable. The advantages of the capsule device are related to the absence of a catheter connecting the probe to the recorder and the longer duration of the study. There is greater comfort without a catheter in the back of the throat, and patients are more likely to go to work and do more normal activities. One disadvantage of the capsule is that it only measures the pH at one level since it cannot be used in the pharynx or the stomach.

The capsule device may cause a vague sensation in the chest or discomfort when swallowing. This may be due to food tugging on the capsule as the food passes, although discomfort occasionally can be felt when swallowing only saliva. In rare instances, the Bravo capsule can cause chest pain requiring removal of the capsule with an endoscopy. Patients **cannot have an MRI** (Magnetic Resonance Imaging) during the test and for 30 days afterwards. Some patients cannot have this type of monitoring. Patients with pacemakers, implantable defibrillators or neurostimulators cannot use Bravo. Patients with a history of bleeding diatheses, strictures, severe esophagitis, varices, obstruction, and prior esophageal resection are not candidates for Bravo pH monitoring.

****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.**