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Wireless Capsule Esophageal pH monitoring (Bravo)

Read this information carefully. This educational handout will explain your appointment time, procedure, and preparation.

Appointment Date: _____ Appointment Time: _____

Location:

Patient Information on Esophageal pH Monitoring

Esophageal pH monitoring 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). 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 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.

PREPARATION FOR THE TEST:

- Stop medications used for treating reflux and for treating stomach acid problems unless you are told to continue these medications by your physician.
 - Some medications should be stopped for 1 week prior to the test. These include Prilosec (omeprazole), Nexium (esomeprazole), Aciphex (rabeprazole), Prevacid (lansoprazole), Protonix (pantoprazole), Zegarid (immediate release omeprazole).
 - 0 Some medications need to be stopped for 2 days before the test. Examples of these medicines are: Zantac (Randitidine), Tagamet (Cimetidine), Axid (Nizatidine), Pepcid (Famotidine).
- If you have questions about other medications, talk with your physician.
- Do not eat or drink after midnight the night before the test.

PROCEDURE:

The pH monitoring system uses pH sensors that register the reflux of acid from the stomach into the esophagus. During the pH monitoring, you should try to perform your regular activities during the day, including the ones that may bring on your symptoms. Regular meals should be eaten during the test. Follow your doctor's instructions regarding medication use or avoidance during the test.

Wireless capsule esophageal pH monitoring

Monitoring esophageal pH can also be performed with Bravo pH monitoring which uses a 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. During an upper endoscopy using conscious sedation, the capsule is introduced into the esophagus on a catheter through the nose or 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. For this test, the monitoring period is 48 hours (2 days), 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 returns 48 hours after placement and the recorder is 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. 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.