

24-hour pH Study

pH is a measure of acidity or alkalinity. Most people are familiar with pH tests done on soil or swimming pools. An esophageal pH test measures how often stomach acid flows into the lower esophagus and the degree of acidity during a 12-24 hour period.

Why do I need a 24-hour pH test?

A measurement of esophageal pH is of great importance in evaluating heartburn and non-cardiac chest pain. It can also be useful in determining the success of treatment for acid reflux. Some patients with acid reflux do not have typical heartburn. pH testing is particularly helpful in making the correct diagnosis.

What should I expect the day of the procedure?

To prepare for the test, you should take no food or liquid for 8 hours prior to the exam. In most cases, you should not take any medicine that can affect the function of the esophagus or control of stomach acid. Your physician will give you specific instructions about which medications you should or should not take.

The test is initiated at the hospital and takes about 30 minutes to start. A small, thin tube is gently inserted through the nose, down to the end of the esophagus. Sometimes a separate test, called esophageal manometry, is performed at the same time to assure proper placement of the pH tubing within your esophagus. The pH tubing is attached to a portable recorder that you carry at your waist. You can then leave the hospital and go about your usual daily business. It is important that you carry out all of your usual activities in order to assess the presence or absence of esophageal acid under real life situations. The acid content in the lower esophagus is recorded throughout the day and night. When you experience reflux or other symptoms, you press a button on the recorder. This marks the time so it can be determined if acid was present in the esophagus at the time of the symptom. When your study time is complete, you will return the recorder to the hospital and have the tube removed.

When will I receive results?

Generally, the esophageal pH test will show a small amount of acid seeping into the esophagus at various times during the day and night. This is normal for almost everyone. However, if protective actions of the esophagus do not function properly, the test will show a greater degree and duration of stomach acid in the esophagus. Your physician will read the pattern of pH changes recorded during your test and provide you with results and interpretation. You and your physician will decide on treatment plans and changes based on the results of the 24-hour pH study.