

DIGITRAPPER® PH-Z TESTING:

Laryngopharyngeal reflux (LPR) is the result of retrograde flow of stomach contents. This reflux can come up not only into the esophagus, but all the way up into the back of the throat and nose, including around the area of the voice box and windpipe, causing a variety of atypical and often mysterious symptoms that are not traditionally linked to reflux. Most reflux as we know refers to gastroesophageal reflux (GERD), but when it comes further up, it is often called laryngopharyngeal reflux (LPR).

Typical symptoms of LPR are often different than GERD, and therefore the diagnosis of LPR is often missed which can be quite frustrating and may lead to many unnecessary tests and treatments. These symptoms include:

Excessive mucus/phlegm and throat clearing

- Postnasal drip
- Sour taste in the mouth
- Sore or burning in the throat
- Hoarseness & chronic dry cough
- Frequent 'tickle' or lump in the throat (globus sensation)



It has been reported in up to 10% of patients presenting to an ENT office, and more than 50% of patients with hoarseness have been found to have reflux-related disease. There is a danger in failing to recognize LPR, while overdiagnosis of LPR can lead to unnecessary costs and missed diagnoses.

There are a variety of methods to perform diagnostic testing to assess the presence and severity of reflux disease. Generally, they are called a pH study. There are 2 main types that are performed and often available. The first one is the one that is most commonly done by a gastroenterologist during an upper endoscopy procedure. It is called the Bravo® pH study. It is a sensor which is tenanted onto the esophagus during an endoscopy procedure. The sensor disintegrates and dissolves in your GI tract. Patients are given a sensor which is a small device they were on their belt or around the neck for 48 hours and it communicates via Bluetooth with the sensor and esophagus which sends information to the computer. The sensor computer is then turned in to the GI doctor after 2 days and the data is downloaded and assessed.

The alternative to the Bravo® pH study is the Digitrapper® pH-Z testing is a minimally-invasive way to assess reflux for assessing acid and non-acid causes for patients with atypical symptoms suggestive of proximal reflux etiologies. Many patients with LPR that have atypical symptoms such as chronic unexplained cough often have non-acid proximal reflux and often have a normal Bravo pH study. The study involves a thin catheter that is placed trans-nasally in the clinic, with use of only topical anesthetic to ensure comfort during placement and during the ensuing 24 hours required for the study.



The catheters are made from hypoallergenic and latex-free materials in a thin, patient-friendly design resulting in minimal discomfort during the procedure. The catheters, which are disposable, provide valuable data that can characterize reflux as either acid or non-acid, using impedance sensors to monitor fluid movement as well as to detect reflux in three categories: Distal esophageal reflux, Full column esophageal reflux, Laryngopharyngeal reflux.

Digitrapper® pH-Z 24-HR PH/Impedance study instructions:

This study must often be performed while off of reflux medications for a period of 7-10 days, unless otherwise instructed by your physician. Check with the doctor who ordered your 24-hour pH impedance test whether they want the test performed ON or OFF acid reflux medications.

If your doctor wants the test performed **OFF** acid reflux medications, please read the following:

- These medications should be **STOPPED FOR 7 DAYS** before the test: Pepcid (Famotidine), Prilosec (omeprazole), Nexium (esomeprazole), Aciphex (rabeprazole), Prevacid (lansoprazole), Protonix (pantoprazole), Zegerid (immediate release omeprazole), and Dexilant (dexlansoprazole).
- These medications should be **STOPPED FOR 2 DAYS** before the test: Tagamet (Cimetidine), Axid (Nizatidine), Pepcid (Famotidine).
- Medications such as TUMS, Gaviscon, Maalox and Mylanta can be taken the day before the test.
- Take all other medications ordered by your doctor. On the day of your procedure, take your other medications with a sip of water up to 2 hours before your study. These medications include high blood pressure and heart medication.
- If you are diabetic, follow your physician's instruction regarding medication dosage.
- Do not eat or drink anything 6 hours before your scheduled appointment, including gum, mints, or hard candy.
- Wear loose comfortable clothing that buttons up in the front.
- Do not take a shower or tub bathe while catheter is in place; the recorder must not get wet.

If your doctor wants the test performed ON acid reflux medications, then please read the following:

- Continue all your regular medications.
- On the morning of the test, you can take your regular medications with sips of water.

Please feel free to contact us if you have any questions or concerns: 904-595-7475