

A Member of Trinity Health

We value your feedback, if there is anything we can do to serve you better, please let us know.

Thank you for allowing us to participate in your care!

# The Heartburn Center

301 Prospect Avenue Syracuse, NY 13203-1807 Phone: 866-478-2876 or 315-726-7033 Fax: 315-448-2762



# Guide to Testing and Evaluation

# The Heartburn Center

Compassionate. Comprehensive. Coordinated Care.

# Welcome to the Heartburn Center

The Heartburn Center (HBC) at St. Joseph's Health is the first dedicated and comprehensive heartburn treatment center in the greater Syracuse region.

The Heartburn Center helps those who have occasional discomfort, experience a more significant array of symptoms and conditions, or those who may need surgery for symptom relief. The team will work with you to help you understand your disease and the available treatment options.

The Heartburn Center is led by a coordinated team of highly trained compassionate physicians. You will be surrounded by a team of experts who are committed to your well-being and who will work together with other specialists and primary care providers as part of a collaborative treatment plan. Our medical team includes gastroenterologists, robotic surgeons, bariatric surgeon, pulmonologist, dietician, ENT, and a psychology care provider.

The Heartburn Center recognizes that every patient has different needs, circumstances, and challenges; no single treatment plan is suited for everyone. Our team of professionals work together to develop an in-depth medical strategy specific to each patient's condition. Our goal is to provide treatment to manage or eliminate symptoms so that you can fully enjoy your life.

## **Our Mission**

We, St. Joseph's Health and Trinity Health, serve together in the spirit of the Gospel as a compassionate and transforming healing presence within our communities.

# **Testing and Evaluation**

Several tests or examinations may be necessary to accurately diagnose a patient's condition. These tests can help find the cause of gastrointestinal symptoms and are normally performed on an outpatient basis.

☐ Upper GI / Barium Swallow is a series of x-rays that show the digestive tract. This test can help detect the presence of reflux, hiatal hernia or obstruction.
☐ Marshmallow Barium Swallow is also a series of x-rays that show the digestive tract. This study can help detect swallowing dysfunction or esophageal narrowing.
☐ Modified Barium Swallow is a procedure that observes the swallowing of food and liquids. This test evaluates the swallowing process to identify the cause of impaired swallowing and/or aspiration.
☐ High resolution manometry (esophageal motility study) is a study to measure the strength, pressure, and coordination of the muscles of the esophagus. The results of this test can help detect esophageal dysfunction.
☐ Endoscopy also known as esophagogastroduodenoscopy, is a procedure used to view the esophagus, stomach, and part of the small intestine. This examination looks for signs of reflux, peptic ulcer disease, tumors, or other abnormalities in the upper digestive system.
$\hfill\square$ 48 hour Bravo pH test is done in conjunction with an endoscopy. This test is used to measure the rate of reflux events and the acidic pH of the reflux.
$\square$ 24 hour impedance pH test is usually done in conjunction with a motility study. This test is used to measure the rate of reflux events and the pH (acid vs alkaline) of the reflux.
☐ Gastric Emptying Study is a procedure that measures the speed with which food empties from the stomach into the small intestine. This test is used to diagnose abnormal emptying of food from the stomach.

# **Preparing for your Evaluations**

**Upper GI / Barium Swallow and Marshmallow Barium Swallow Instructions:** 

### Before the test:

- Stop eating and drinking for 6 hours prior to test
- No smoking or gum chewing for 6 hours prior to test

# **During the test:**

You will be asked to drink about 1 ½ cups of barium solution (a chalky drink with the consistency of a milk shake). Through a series of x-rays, the solution is followed from the mouth to the esophagus and into the stomach. The test may take 30-60 minutes to complete.

For the **marshmallow study** you will be asked to chew and swallow a regular sized marshmallow that is dipped in barium. Through a series of x-rays, the marshmallow is followed from the mouth to the esophagus and into the stomach. The test may take 20-40 minutes to complete.

## After the test:

When you return home, you can resume your normal diet unless you are advised otherwise by your doctor. Because the barium is white, your stools may be chalky and light-colored for 1 to 3 days. Do not be concerned about this. You should increase your fluids to help flush the barium out of your system.

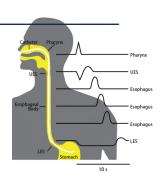
# High Resolution Manometry (esophageal motility study) Instructions:

### Before the test:

- Stop eating and drinking midnight the day prior to test
- No smoking for 8 hours prior to test
- Stop taking blood thinners 3 days prior to test (see Endoscopy page for list of blood thinners)
- Stop taking Zepbound (Mounjaro), Ozempic (Semaglutide), Wegovy for 7 days prior to test; stop Cisapride, Bethanechol, Erythromycin and Motegrity 5 days prior to test.
- Stop taking smooth muscle relaxants dicyclomine (Bentyl), hyoscyamine (Levsin), amitriptyline (Elavil), valium, Ursodiol x 48 hours prior to test
- Stop taking metoclopramide (Reglan); Baclofen 3 days prior to test

# **During the test:**

You will be asked to sit-up on a stretcher. A soft thin tube is placed through the nose and down the esophagus. Insertion of the tube may be uncomfortable and cause gagging. This is a normal reaction and will pass once the tube is positioned. Next, you will be asked to swallow a sip of salt water several times. Sensors along the tube measure the pressure while you swallow. Measurements are printed out as tracings, much like a heart test tracing. The test may take 30-45 minutes to complete.



### After the test:

It is normal to experience some nasal congestion and soreness in your throat. You may resume your normal diet and activities. You will discuss the results of the test with your healthcare provider at an upcoming appointment because time is needed to review and interpret the tracings.

## **Endoscopy Instructions:**

## Before the test:

- Stop eating and drinking midnight the day prior to test
- Stop taking all blood thinners 3 days prior to procedure:

□ warfarin (Coumadin) (Jantoven)	☐ ticagrelor (Birlinta)
□ dabigatran (Pradaxa)	□ apixaban (Eliquis)
□ aspirin + dipyridamole (Aggrenox)	□ clopidogrel (Plavix)
□ rivaroxaban (Xarelto)	□ prasugrel (Effient)
□ Vitamin E	□ Fish oil

- The morning of your procedure please take only blood pressure, breathing, seizure, anxiety & thyroid medications with a sip or two of water.
- Please bring inhalers (puffers) with you to the procedure

□ NSAIDS (Ibuprofen, Aleve, Naproxen)

 <u>Diabetics:</u> Do NOT take your diabetic pills the morning of the procedure; DO test your blood sugar. Check with your provider if you take insulin.

## **During the test:**

You will have an intravenous line (IV) placed and be seen by an anesthesiologist who will sedate you using IV medications. A flexible tube with a light and camera will be inserted through the mouth to visually inspect the esophagus, stomach, and part of the small intestine. Small tissue samples known as biopsies may be taken. The procedure may take 20-30 minutes.

### After the test:

You will need a responsible driver, over the age of 18, to drive you home due to the sedation. You may experience a sore throat; this is normal. You may resume your normal diet and activities.

# pH Testing: 48 hour Bravo Instructions:

## Before the test:

- Stop eating and drinking midnight the day prior to the test
- Stop taking blood thinners 3 days prior to test (see page 5 for list of blood thinners)

## You must stop GERD medications in accordance with the chart below:

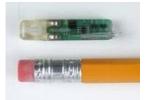
Stop PPI's 10 days before pH test		Stop H2 Blockers 3 days before pH test	Stop Antacids 24 hours before pH test
Nexium Aciphex Prilosec Prevacid Protonix Dexilant Zegerid Voquezna	(esomeprazole) (rabeprazole) (omeprazole) (lansoprazole) (pantoprazole) (dexlansoprazole)	Zantac (ranitidine) Pepcid (famotidine) Tagamet (cimetidine) Reglan (metoclopramide) Carafate (sucralfate) Axid (nazatidine)	Stop any over the counter antacids such as Tums or Rolaids
Stop on:		Stop on:	Stop on:

# **During the test:**

Please eat and drink as normally as possible, including foods that trigger symptoms. Do not chew gum or hard candy during this test. You will maintain a diary to record when you are eating, lying down, and experiencing symptoms. You may continue your normal daily activities.

### 48 hour Bravo

- Monitor must stay within 3 feet of you during the entire test period.
- Monitor will alarm if beyond 3 feet.
- You may shower but do not bring monitor into the shower / bath. It is best to place the monitor into a sealed plastic bag.



# After the test:

### 48 hour Bravo

- After 48 hours you will need to return the monitor to the Endoscopy Unit or place of procedure.
- Endoscopy staff will give instructions on how and where to return the monitoring device.

  \*THIS MUST BE RETURNED AT TIME PROVIDED\*
- The recording device will automatically shut off after the testing period is completed.
- The capsule will detach in approximately 7-10 days.
- You cannot have a MRI within 30 days of the placement of the Bravo capsule.
- Anti-reflux medications may be resumed after the pH testing is complete.
- Your test will be analyzed and results will be reviewed with you during the follow-up visit.

# pH Testing: 24 hour Impedance Instructions:

## Before the test:

- Stop eating and drinking midnight the day prior to test
- Stop taking blood thinners 3 days prior to test (see page 5 for list of blood thinners)

## You **must stop GERD medications** in accordance with the chart below:

Stop PPI's 10 days before pH test	Stop H2 Blockers 3 days before pH test	Stop Antacids 24 hours before pH test
Nexium (esomeprazole) Aciphex (rabeprazole) Prilosec (omeprazole) Prevacid (lansoprazole) Protonix (pantoprazole) Dexilant (dexlansoprazole) Zegerid Voquezna	Zantac (ranitidine) Pepcid (famotidine) Tagamet (cimetidine) Reglan (metoclopramide) Carafate (sucralfate) Axid (nazatidine)	Stop any over the counter antacids such as Tums or Rolaids
Stop on:	Stop on:	Stop on:

## **During the test:**

Please eat and drink as normally as possible, including foods that trigger symptoms. Do not chew gum or hard candy during this test. You will maintain a diary to record when you are eating, lying down and experiencing symptoms. You may continue your normal daily activities.

## 24 hour Impedance

- Monitor will be connected directly to the impedance catheter.
- The catheter will be taped to your cheek.
- Do NOT shower / bathe during the test.
- The catheter may irritate your throat or nose. This is normal.
- The catheter may tug at your throat during eating / swallowing. This is normal.



## After the test:

## 24 hour Impedance

- After 24 hours you will return to the Endoscopy Unit for removal of the catheter.
- You may notice some continued discomfort in your throat / sinuses following removal of the catheter- this is normal.
- Endoscopy staff will give instructions on how and where to return the monitoring device.
- Anti-reflux medications may be resumed after the pH testing is complete.
- Your test will be analyzed and results will be reviewed with you during the follow-up visit.

# **Gastric Emptying Study Instructions:**

### Before the test:

- Stop eating and drinking for midnight the day prior to test
- Do NOT take any over-the-counter stomach medications such as Rolaids or Tums for 24 hours prior to test
- Hold all Promotility drugs such as Reglan (metoclopramide); Cisapride, Bethanechol, and Erythromycin for 3 days prior to test
- The solid test takes about 4 hours to complete. Plan to bring something to help pass the time
- The liquid test (if ordered) takes about 1 hour to complete

# **During the test:**

You will eat a meal in which solid food, liquid food, or both, are mixed with a small amount of radioactive material. The meal usually consists of 4oz egg omelet, 4oz of water, 2 pieces of white toast with jelly or oatmeal. A technologist will take images of your stomach at various intervals to record the emptying time of the ingested food.

### After the test:

There are no side effects of a gastric emptying study. The radioactive material is not absorbed into the body and is eliminated in the stool.

## **Modified Barium Swallow Instructions:**

## Before the test:

• There are no special instructions prior to this test, you may eat and drink as normal

# **During the test:**

You will ingest food and liquids containing barium. The consistency of the food varies, ranging from semisolid (like applesauce) to solid foods (such as a cookie). As you swallow, a speech therapist and radiologist observe the transit of food from the mouth to the pharynx and on through the esophagus. The test may take 20-30 minutes to complete.

### After the test:

When you return home, you can resume your normal diet unless you are advised otherwise by your doctor. Because the barium is white, your stools may be chalky and light-colored for 1 to 3 days. Do not be concerned about this. You should increase your fluids to help flush the barium out of your system.