

#### INDIANA UNIVERSITY HEALTH

GI MOTILITY LAB

&
GASTRIC ELECTRICAL STIMULATION PROGRAM

## ANTRODOUDENAL (SMALL BOWEL) MANOMETRY

**ANTRODOUDENAL (SMALL BOWEL) MANOMETRY**-Your physician has ordered this study which provides information regarding the muscle activity of the stomach and small bowel during fasting and after a meal. These are tests performed on patients with symptoms suggesting that the stomach and small bowel is not functioning normally. These tests are generally performed at specialized GI motility centers on patients whose diagnosis is unclear or who have not improved in response to treatments of their condition.

### How do I prepare for this test?

- 1. Full Liquid diet for 2 days prior to test
- 2. Do not eat or drink after midnight the night before the test.
- 3. Some medications can affect this test:
  - a. Prokinetic medications such as Reglan (metoclopramide), Zelnorm (tegaserod), erythromycin, Motilium (domperidone) and antispasm medications such as Bentyl (dicyclomine), Donnatal, Levsin (hyocyamine), and/or Robinul should be stopped for <u>two</u> <u>days (48 hours) prior to this test</u>. If you can't, you should discuss with your doctor or health care provider who ordered the test.
  - b. Pain medications can also slow down the intestine and can affect this test. These medications include: Pain medications such as Demerol, codeine, morphine, Oxycontin, Percocet, and Percodan. These medications should be stopped for <u>two days (48 hours)</u> <u>prior to this test</u>. If you can't, you should discuss with your doctor or health care provider who ordered the test.
- 4. Medications that need to be taken regularly, such as high blood pressure and heart medication, can be taken with small sips of water when you wake up in the morning of the test.
- 5. If you have diabetes, skipping breakfast may affect the need for diabetic medication. Generally one-half of your usual dose of diabetic medication is taken on the morning of the test. This should be reviewed with your physician or health-care provider.
- 6. If you have questions about a specific medication, ask your physician or nurse.
- 7. Women need to inform their physician or nurse if they are pregnant or think they may be pregnant.

- 8. This test is done immediately after an upper endoscopy. Please follow instructions for the upper endoscopy separately.
- 9. Please complete the enclosed forms and bring a list of all your 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.

  Medicare does not require preauthorization or precertification for this procedure; however, many private insurance carriers and managed care organizations do. We recommend you contact your insurance company prior to your procedure, if you have any questions about coverage.

#### 10. PLEASE ARRIVE 1 and 1/2 HOURS PRIOR TO YOUR SCHEDULED PROCEDURE TIME.

- **a.** Check-in at the <u>Front Admitting Area</u> 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 silver Outpatient elevators**. Take them to the 4<sup>th</sup> floor and go to Glen Lehman Endoscopy Center's Admission desk.
- c. Please use valet parking, which is available under the glass canopy

#### What does this procedure involve?

Antroduodenal manometry, or small bowel manometry, uses a catheter that has pressure sensors to record the contractions of the GI tract. Before the tube is passed, the inside of your nose is numbed and an anesthetic spray or gargle will be used to numb the back of your throat. The catheter containing the pressure sensors is then passed through the nose into the stomach and small intestine. Proper positioning of the catheter is assisted and confirmed by using either X-ray fluoroscopy or endoscopy with conscious sedation.

The tube will measure stomach and intestinal contractions and will remain in place for approximately 6 hours (4 hours while fasting and 2 hours after a test meal). During the study, a test meal will be given to determine how food affects gastrointestinal tract motility. Usually ingestion of the food results in a marked increase in gastric and small bowel contractions. The standard test meal consists of the following: 2 ounces of turkey, 2 packages of Mustard, 2 slices white bread, and apple juice. *If you cannot eat or are allergic to these foods, you need to let the Motility Lab know*. Other meals may be substituted if needed.

Passage of the small bowel manometry tube may be associated with gagging and retching. To lessen the discomfort, the nose and throat will be numbed. The presence of the tube during the study can cause a feeling of discomfort in the throat. Occasionally, the tube cannot be passed out of the stomach into the small intestine. Since X-Rays are used to place the catheter, this test should not be done if you could be pregnant. Women will need to give a urine sample in the morning of the test for a pregnancy test.

# **How is the Antroduodenal Manometry Test Used?**

Antroduodenal or small bowel manometry study provides information regarding the muscle activity of the stomach and small bowel during fasting and after a meal. These tests may help determine what area of the GI tract is not working properly - the stomach, the small intestine or both. The findings may help the physician to manage treatment and help improve symptoms.

These motility tests record the pattern of contractions of the GI tract muscles. Normally, there are three patterns of muscle contraction. The fasting pattern consists of 3 phases that reoccur at approximately 2-hour intervals. The muscles of the GI tract are at rest in Phase I, followed by a period of intermittent contractions in Phase II. Finally, in Phase III, regular rhythmic contractions start at the top of the stomach and continue down to the first part of the small intestine. Phase III contractions are responsible for undigested solids being moved from the stomach into the small intestine and then into the colon. These Phase III contractions are considered the "intestinal housekeeper" and clear food from the upper GI tract. Eating a meal produces a fed motility pattern with more frequent contractions. These contractions help to break down the food into small particles for transport down the GI tract for absorption.

Antroduodenal manometry may help to determine whether symptoms are due to a problem in the ability of the muscles of the GI tract to contract (a muscle disorder) or if the nerves that regulate the muscle contractions are not functional (a nerve disorder). Diseases such as scleroderma, amyloidosis, or visceral myopathy may affect the muscles of the GI tract and cause contractions too weak to move food through the GI tract. Nerve disorders may affect the pattern of the contraction. The contractions are uncoordinated and ineffective in moving food through the GI tract. Mechanical obstruction of the small intestine may be suggested by prolonged contractions after being fed. Gastroparesis (delayed stomach emptying) may be suspected by decreased frequency and force of contractions in the stomach.

\*\*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.