Impedance and pH Study

What is an impedance and pH study?
Your doctor has suggested you/your child have an impedance and pH study as part of the evaluation at National Jewish Health. An impedance and pH study measures the amount of acid and non-acid gastroesophageal reflux you/your child has. Gastroesophageal reflux is the backward flow or reflux of food and acid from the stomach into the esophagus. The esophagus is the tube that takes food from your mouth into your stomach. Everyone has some reflux. An impedance and pH study will help identify if you/your child has increased amounts of reflux and if it is causing trouble breathing or other symptoms.

How do you get ready for the test?

- Adults - Do not eat food or drink liquids for at least 2 hours before the test.
- Children – Do not eat food or drink liquids for at least 4 hours before the test.
- One of the next 2 boxes will be checked. If not, please call us so you know what to do.
  - Do take your reflux/antacid medicines as your doctor has prescribed.
  - Do Not take your reflux/antacid medicines. Check with your/your child's doctor before you stop the medicine.

Stop these medicines at least 3 days before your appointment:
- Zantac® (Ranitidine), Tagamet® (Cimetidine), Axid® (Nizatidine), Pepcid® (Famotidine), Reglan® (Metoclopramide)

Stop these medicines at least 7 days before your appointment:
- Prilosec® (Omeprazole), Prevacid® (Lansoprazole), Nexium® (esomephazole), Protonix®, Pantoloc® (pantoprazole), Aciphex® (rabeprazole).

- Continue to take all your other medicine as you usually do. Parents of children having an impedance and pH study: Bring all your routine medicine with you also.
- Wear a shirt or blouse with buttons down the front. You may need to change into a patient gown during the test.
- Bring your peak flow meter with you, if you have one.
What is done during the test?

Right before the impedance and pH study, medicine will be squirted in you/your child’s nose. This medicine makes the nose numb. When the nose is numb, a small tube will be placed through the nose into the esophagus. The test may be slightly uncomfortable when the tube is placed. The nurse will explain what is being done during the test. Once the probe is placed tape will be placed around the tube and on the nose to keep the probe in place. Placement of the probe in the esophagus will be checked.

The probe is attached to a recording box. The recording box has buttons that you will push during the study. This will be placed in a carrying case with a belt, shoulder strap or backpack. You/your child will wear this for the entire study.

You will also be given a diary. You will keep track of symptoms, when you/your child eats, body position (lying down, sitting or standing) and peak flow measures using the buttons on the recording box and the diary. The nurse will show you how to use the recording box and diary to monitor how you are doing during the study.

It is important that you/your child maintain all regular activities as much as possible during the test in order to obtain an accurate assessment of reflux through a "normal" day. This includes maintaining typical meals, activities, exercise, sleep, etc., while the probe is in place. If you have any questions, please ask.

How long will the test take?

Adults - The impedance and pH study will take 24 hours to complete. Once the probe is in place you will be able to leave the MIDC (Minimally Invasive Diagnostic Center). You will return the next day to have the probe removed. The nurse will let you know the best time to return and where to come to have the probe taken out.

Children - The impedance and pH study will take 24 hours to complete. Your child will either stay at National Jewish during the study or leave the Pediatric Care Unit once the probe is placed. You will know ahead of time whether you child will stay at National Jewish during the study or return home. If your child stays at National Jewish a parent will need to stay with your child during the study. If your child goes home the nurse will let you know the best time to return to have the probe taken out.

How do you get to your test?

Adults - On the day of your scheduled test, check in at the Front Desk in the Adult Clinic. If you have questions before or during your test please call 303-398-1355. Also, if you need to cancel the appointment or change the time please call.

Children - On the day of your scheduled test, check in at the Pediatric Care Unit. If you have questions before or during your test please call 303-398-1355. Also, if you need to cancel the appointment or change the time please call.

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