

Impedance and pH Study For Children

What is an impedance and pH study?

Your doctor has suggested 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 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 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?

- Do not eat food or drink liquids for at least 4 hours before the test.
- One of the next 2 bullets will be checked. If not, please call us so you know what to do.
 - **Do** take the reflux/antacid medicines as your child's doctor has prescribed.
 - **Do Not** take the reflux/antacid medicines. Check with 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® (esomeprazole), Protonix®, Pantoloc® (pantoprazole), Aciphex® (rabeprazole).
- Continue to take all your other medicine as you usually do. Bring all your child's routine medicine with you also.
- Wear a shirt or blouse with buttons down the front. Your child may need to change into a patient gown during the test.
- Bring your child's peak flow meter with you, if he/she have one.

What is done during the test?

Right before the impedance and pH study, medicine will be squirted in 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. Your child will wear this for the entire study.

You will also be given a diary. You will keep track of symptoms, when 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 your child is doing during the study.

It is important that 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?

The impedance and pH study will take 24 hours to complete. Your child will either stay at National Jewish Health during the study or leave the Pediatric Care Unit once the probe is placed. You will know ahead of time whether your 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?

If you are being seen at National Jewish Health, on the day of your child's 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.

Visit our website for more information about support groups, clinical trials and lifestyle information.

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NOTE: This information is provided to you as an educational service of National Jewish Health. It is not meant to be a substitute for consulting with your own physician.

National Jewish Health is the leading respiratory hospital in the nation. Founded 119 years ago as a nonprofit hospital, National Jewish Health today is the only facility in the world dedicated exclusively to groundbreaking medical research and treatment of patients with respiratory, cardiac, immune and related disorders. Patients and families come to National Jewish Health from around the world to receive cutting-edge, comprehensive, coordinated care. To learn more, visit njhealth.org.