NHS

pH impedance study

Information for families

Great Ormond Street Hospital for Children NHS Foundation Trust

This information sheet from Great Ormond Street Hospital (GOSH) explains about the pH impedance study, what it involves and what to expect when your child comes to GOSH for the test.

What is a pH impedance study?

A pH impedance study measures movement of liquid and air up and down the oesophagus (the food pipe between the mouth and the stomach). The main purpose of the study is to enable the doctors to see whether your child has reflux. Reflux is where acid from the stomach can travel back up the oesophagus causing discomfort and sometimes vomiting or choking. With this information, the team will be able to decide on how to manage your child's condition.

At home or before the test

- Your child should stop taking certain medicines before the test – the Consultant may have provided you with this information.
- A member of our nursing team will contact you approximately five days before the test. It is important that we have up-to-date contact numbers for you.
- The nurse will re-explain what the test involves and confirm with you what medications will need to be stopped before the test. They will also confirm with you what time your child should stop eating and drinking on the day of the test. The nurse will also answer any questions you may have.
- Your child should be nil by mouth for two hours before the test. This means that they should not eat or drink anything (including water) for two hours before the test.
- Your child should not eat or drink anything until an X-ray has confirmed that the probe has been inserted correctly and the recording device attached – there is more information about this below.
- If your child becomes unwell before the test please phone the Gastroenterology Investigations Unit (GIU) on 020 7405 9200 extension 0212 to speak with a nurse. If your call is not answered, our nurses will be with another child so please leave a message and a member of the team will return your call within the next 24 hours.

At the hospital

- Your admission letter will inform you which ward to go to when you arrive at GOSH. Please note that some patients will be asked to attend the GIU within Kingfisher Ward, but other patients will need to go to another ward and then be transferred to the GIU.
- Once you have been admitted to the GIU, a nurse will carry out some tests to ensure your child is fit for the procedure. These tests include checking their weight, blood pressure, and heart rate.
- The nurse will explain the procedure a final time and will answer any further questions. If you are happy to proceed with the pH impendence study, we will ask you to sign a consent form.
- Once you have signed the consent form the nurse will prepare the equipment for your child's study – this can take around 30 minutes.

Starting the test

- The nurse will pass a thin tube containing the pH probe into your child's nostril, down the back of their throat and into the oesophagus .It is normal for the probe to cause a slight irritation once inserted, but this usually resolves shortly after the probe is in place. Some children may have a nosebleed when the tube is inserted into their nostril if this does happen it will stop quickly.
- Your child should not eat or drink anything until an X-ray has confirmed that the probe has been inserted correctly and the recording device attached.
- The nurse will ask you to attend the X-Ray Department where a radiographer will take an X-ray to confirm that the probe has been inserted correctly.
- After the X-Ray you will return to the GIU and be asked to wait while the X-ray is reviewed to confirm that the probe is fitted correctly. If the X-ray shows that the probe is not fitted correctly, the probe may need to be slightly adjusted. It is very uncommon for the probe to be completely removed and re-fitted.
- Once the probe is confirmed to be fitted correctly, the nurse will connect the other end of the probe to a recording box which is worn in a shoulder bag.
- The test has now started and your child can eat and drink following the instructions below. You can now return to your ward, or leave the GIU. If you are staying at the Patient Hotel overnight you will be able check into your room after 3pm – you are welcome to wait in Kingfisher Ward Waiting Area until your room is available.

During the test

- Your child should avoid the following foods and drinks during the test:
 - Foods and drinks that are very hot
 - Foods and drinks that are very cold
 - Drinks that include caffeine (such as tea, coffee and energy drinks)
 - Fizzy drinks
 - Fruit juices
- These foods can affect the accuracy of the test we may have to repeat the test at a later date if your child eats or drinks any of them.
- Before you leave the GIU, your nurse will give you a diary to complete over the next 24 hours. You will need to record everything your child eats and drinks and the times that you give your child medications. You may be asked to record additional information such as the times your child is sleeping, their body position and any physical activity.
- After 24 hours, you will need to return to the GIU for the nurse to disconnect the recorder and remove the tube. Once this is done, you will be able to go home, or return to your inpatient ward.
- Please note that the result of this test will be given at your next outpatient appointment

When you are back home after the test

- Please re-start your child's medicines as before.
- If the pH Impedance study was requested by a consultant in a speciality other than Gastroenterology, the results of the test will be forwarded to that department who will then contact you.
- If the pH impedance test was requested by a Gastroenterologist we will make sure that you have a follow-up appointment before you leave the GIU to discuss the results.

Any questions?

- If you have questions about the test, or child becomes unwell in the days before the test, please call a nurse from the GIU on 020 7405 9200 ext.0212. If your call is not answered, our nurses will be with another child so please leave a message and a member of the team will return your call within the next 24 hours
- If you have questions about your admission, please call the Admissions Coordinator on 020 7405 9200 ext. 5010 or 0563.

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