

pH / Impedance Study

Department of Paediatric Gastroenterology & Nutrition Information leaflet for parents and carers

Your child has been referred for an investigation known as a 24 hour pH or pH with Impedance study. This leaflet explains what happens during the test and how to prepare for it.

If you have any further questions, please speak to the clinical nurse specialist or doctor caring for your child.

What is a 24 hour pH / Impedance study?

The test is designed to measure the amount of stomach fluids that refluxes (or flows back) from the stomach into the oesophagus (or food pipe) over a 24 hour period. We usually ask you to bring your child to Jungle ward (the paediatric day bed unit on 1st floor, Lanesborough wing) so that we can pass a very thin and flexible tube (catheter) from the nose into the oesophagus. For the remainder of the 24 hours of monitoring, your child will be allowed to go home with instructions on using and then returning the equipment.

Why does my child need this test?

It will help to decide if your child's symptoms are caused by reflux and help guide your referring doctor on your child's management.

What are the symptoms of gastro-oesophageal reflux disease (GORD)?

Symptoms / signs of GORD vary but include the following: vomiting; regurgitation; food aversion; growth faltering; breathing difficulties including stopping breathing; coughing and seizure-like episodes.

In some children there are no obvious symptoms. The pH test may also be requested before consideration of or before planned surgical procedures e.g. the insertion of a feeding tube into the stomach or anti-reflux surgery.

How can I prepare my child for the test?

Your child should have stopped all anti-reflux medication e.g. Ranitidine (Zantac), Omeprazole (Losec), Lansoprazole (Zoton), one week prior to the test (minimum of five days). If your child is taking a prokinetic drug e.g. Domperidone or Erythromycin, then this must be stopped 72 hours before the test. Some antacids e.g. Gaviscon may be continued up to 24 hours before the test.

Your child should have nothing to eat or drink for three to four hours before the investigation is due to start. However, if your child is having the test as part of another investigation (e.g. upper GI endoscopy) under a general anaesthetic then please follow the relevant preparation instructions with which you have been provided. Less commonly the test is performed whilst your child is continuing to take their anti-reflux medications but your doctor will advise you on this.

Asking for your consent

The Clinical Nurse Specialist or doctor will explain the procedure to you and your child and ask you to sign a consent form (which states the benefits and the risks). This is to ensure that you understand the tests and its implications. If you would like more details about our consent process, please ask for a copy of our policy.

What happens during the test?

A thin acid-measuring catheter will be passed into your child's oesophagus through their nose. The catheter will be securely taped to the cheek and behind the ear. The catheter will remain in place for 24 hours and is attached to a small recording machine.

After the catheter has been inserted, your child will have a chest x-ray to ensure it is in the right position. Sometimes a small adjustment (1-2 cm) to the position of the catheter is necessary.

The recording will then start.

The risks are minimal and can include gagging or retching with the insertion of the catheter, a runny nose, sneezing, nasal discomfort and a sore throat. An x-ray will be performed to make sure the catheter is placed accurately. There is a small radiation dose with the x-ray required to check the catheter position.



Will my child feel any pain?

This may be slightly uncomfortable for a short period of time, as the tube is being passed. If there is any persisting pain, then please alert the nurse or doctor as further assessment may be required. In some cases, it may be necessary to remove the catheter and abandon the procedure. If your child experiences persisting pain, discomfort or difficulties with breathing when you are at home please remove the probe from your child and follow the guidance below in section "*Who to contact if you have a problem?*".

What happens after the catheter is placed and when we go home?

In most cases you will be able to go home with your child for the 24 hour monitoring period. However, in some cases it may be necessary for your child to stay in hospital overnight. It is important that your child continues with his/her normal routine to record a typical day. You will be asked to complete a diary during the period of the test to record meals and symptoms. This will be explained to you.

- Your child may eat and drink as normal. It is normal for the catheter to move slightly with swallowing.
- All symptoms must be recorded by pressing the button and recording in the diary.
- After 24 hours your child will need to return to Jungle ward for the catheter to be removed and the recording to be stopped. Removing the catheter is a very simple procedure and only takes a few seconds.

Who to contact if you have a problem?

During normal working hours you can contact the Clinical Nurse Specialist (CNS) on **020 8725 5050** or Jungle ward on **020 8725 2034/5**.

If the probe becomes displaced before you leave the hospital it may be possible to pass it again.

If the probe comes out when you are at home or outside normal working hours it will not be possible to re-pass it. If this happens please ring either the CNS or Jungle ward during normal working hours and bring the box back as soon as possible.

If you have a question or are concerned during outside normal working hours and you need urgent medical advice, please ring the NHS 111 service or attend your local emergency department.

What happens to the results? Will my child have a follow-up appointment?

The information on the recorder is downloaded onto a computer after it is returned and the results analysed. The report will be available to your referring consultant who will discuss the results with you by phone or when you come to your next clinic appointment.

Contact us

During normal working hours (9am – 5pm) please contact the Clinical Nurse Specialist (CNS) on **020 8725 5050** or Jungle ward on **020 8725 2034/5**.

Useful sources of information

For further administrative queries, please contact paediatric admissions on **020 8725 3648/2102**.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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