

High Resolution Oesophageal Manometry and 24-hour pH / Impedance Studies

What is High resolution Oesophageal Manometry?

High resolution Oesophageal manometry is an investigation that gives a detailed look at the working of your oesophagus (gullet). It will assess your swallowing, by measuring pressure in your oesophagus; recording its strengths and weaknesses.

It also assesses the valve (sphincter) separating the oesophagus from the stomach, to ensure it is correctly located and working correctly.

What is 24hr pH / Impedance?

24-hour pH studies record the amount of acid coming up from the stomach into the gullet over a 24-hour period. It can also see if reflux episodes correspond with symptoms of reflux.

Impedance looks at the movement of air and fluid within the oesophagus. It can be incorporated within the pH catheter to investigate acid and non-acid reflux, if requested.

What are the potential risks of this investigation?

For the vast majority of patients this investigation is performed without any problems. However, like many other investigations there are potential risks, these include a reaction to local anaesthetic spray (if used) and that your nose or throat may feel sore. This should settle once the tube is removed. On rare occasions, insertion of the catheter can cause a fainting response or

a nose bleed. As the catheter will be passed into your oesophagus, there is a theoretical risk of oesophageal perforation. This is extremely rare but this risk will be included during the consenting process. Every attempt will be made to ensure you are as comfortable as possible throughout the test. If you are at all concerned please contact the department of Clinical Measurements for advice.

Important information for you prior to the investigation

Please read your appointment letter carefully and contact the department of Clinical Measurements if you have any allergies or disabilities that may affect this test.

If you are taking any of the following medications you should temporarily stop these before your investigation:

Group A

Stop any Proton Pump Inhibitor (PPI) medication 1 week before the test. For example:

- Omeprazole (Losec)
- Lansoprazole (Zoton)
- Pantoprazole (Protium)
- Rabeprazole (Pariet)
- Ondansetron (Zofran)
- Esomeprazole (Nexium)

Group B

Stop any antacid medications (H2-receptor antagonist) or medications to aid with swallowing 3 days before the test. For example:

- Ranitidine (Zantac)
- Cimetidine (Tagamet)
- Nizatidine (Axid)
- Famotidine (Pepsid)
- Cisapride
- Motilium (Domperidone)
- Maxalon (Metoclopramide)

Group C

Stop any over-the-counter antacid medications 24 hours before the test. For example:

- Gaviscon
- Rennie
- Gastrocote
- Settlers
- Algicon

If you are unsure whether or not you are taking these medications, please contact your GP, your pharmacist or this department (01392 402144).

If you normally use drugs in group A and/or B and are struggling without them, you may use the drugs in group C (bought from most supermarkets/pharmacies) up to 24 hours before the test. **Please take no antacid medication for the final 24 hours before your test.**

Please refrain from eating for 4 hours prior to your appointment time. You may have clear fluids up to 2 hours before your appointment time.

It would be helpful if you could bring a list of all current medications with you.

You should allow up to 1.5 hours for your investigation. Occasionally the appointment can take longer than planned. If your appointment is delayed for any reason we will endeavour to tell you as soon as possible.

If you are unable to attend your appointment for any reason, please inform us as soon as possible so we may offer the appointment to someone else.

What happens during the investigation?

A Clinical Physiologist and a health care assistant will conduct your investigation. They will greet you and discuss the investigation with you in detail, asking you about your symptoms and answering any questions you may have. Once you are happy with the explanations and have had your questions answered, you will be asked to sign a consent form.

Oesophageal Manometry

For the oesophageal manometry, a thin tube (called a catheter), will be placed into your stomach via your nose. This is done whilst you are drinking small sips of water through a straw. The catheter has water flushing through it at a slow rate; a towel will protect your clothing.

You will lie on a couch while the test is carried out. The catheter will remain in the same place once its position has been confirmed, for the measurements to be taken. We will ask you to swallow small amounts of water at various intervals, so that we can measure the swallowing mechanism. Following this, you may be asked to eat small amounts of solid food, such as bread. This test may be uncomfortable, but should not be painful. Once finished, we will remove the catheter.

24-hour pH /Impedance Measurement

For the 24hr pH / Impedance test, another smaller catheter will be placed into the gullet in the same way as the first tube and secured in place with tape to your nose, cheek and neck. You will wear this tube home with you for the following 24 hours. You will be asked to undergo as normal a day as possible, recording the following things on a diary sheet we provide:

All symptoms

Start time and end time of everything you eat and drink

When you go to bed and when you get up in the morning

Please note: It is important that we gather as much information as possible during the investigation. It may be necessary to encourage your symptoms by eating and drinking things that you may normally avoid.

You will be asked to remove the catheter yourself after the monitoring period. You will be given clear instructions to follow. Alternatively, an experienced health professional will remove it for you on your return to the department. All equipment must be returned in person at the agreed time as it will be required for patients the following day'. At this point you can re-commence any medication you have stopped for the investigation.

What happens after the investigation?

You may feel that your nose and throat are a little sore. This should ease after a few hours. If you have any problems, please contact the Department of Clinical Measurements for advice.

The findings of the investigation are always sent to your consultant who will then write to you or arrange a follow up appointment to explain the findings of the investigation and advise you of any further treatment.

Frequently asked questions

Will I be able to drive with the pH catheter in place?

Our advice is not to drive during the test. We suggest arranging for someone to drive you home from your appointment and back the following day, or that you use public transport.

Will I be able to blow my nose, cough or vomit?

The catheter will be securely taped in place and should not move during these activities. Rarely, if you vomit, the catheter may be vomited back into your mouth. If this occurs you would need to remove the catheter by un-taping the catheter and pulling it out through the nose following the clear instructions you will be given for removing the catheter.

Will I feel the catheter during the test?

You may be able to feel the catheter, particularly when eating when it may pull on your nose. However, most patients get used to this over time and are able to cope well with the test.

Will I be able to go to work?

We advise patients to follow a normal routine where possible, depending on the nature of your work it may still be possible for you to work during the test. If you feel it is inappropriate to go to work, please try to be as active as you would normally be.

Will I damage the equipment?

The equipment is expensive and we ask that you are careful with it. It is not waterproof and so you will not be able to have a bath or shower but you will be able to have a 'strip wash'.

Any further questions?

If you have any further questions about the investigation or wish to speak to either our Clinical Physiologists or nurses regarding your appointment, please telephone the **Department of Clinical Measurements on 01392 402144**.

The Trust cannot accept any responsibility for the accuracy of the information given if the leaflet is not used by Royal Devon staff undertaking procedures at the Royal Devon hospitals.

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