

Oesophageal investigation

Manometry and pH/pH Impedance Measurement

Clinical Measurement Department

This information leaflet is to provide information regarding a test which you have been referred for.

What is this test measuring and what is it for?

The first test is carried out to measure the muscular movement of your oesophagus (gullet). The muscles in the oesophagus should squeeze in a downward motion, pushing food and fluids through into the stomach. If this movement is disorganised for any reason you may experience feelings of food getting stuck or taking a long time to pass down.

There is a tight band of muscle called a sphincter, or valve, at the point where the oesophagus goes into the stomach. This is there to create a barrier between the stomach and the oesophagus to prevent acid and stomach content travelling back up into the oesophagus. We will be measuring pressure in this sphincter to see how well it is working. If it is too tight or does not relax fully then food could get lodged in the oesophagus and take longer than normal to pass down.

If the oesophagus or the sphincter are not working as they should you may be experiencing problems with swallowing, chest pain, or heartburn. You may be aware of some acid reflux.

The 2nd test is a measurement of pH in your lower oesophagus. pH tells us whether significant stomach acid is leaking into the oesophagus over a 24 hour period. The pH test may be combined with an impedance test. Impedance tells us about reflux of stomach contents whether acidic or not.

What to expect during the test:

We will start by explaining the whole procedure to you and answer any questions you may have. We will then require you to sign a consent form, which confirms that you are happy for us to carry out the tests.

A thin tube called a pressure catheter will be passed down through your nose into your oesophagus and stomach. This pressure catheter allows us to measure the muscular movement within the oesophagus and the sphincter.

As the catheter is passed around the back of your nose you may feel some discomfort and it may bring a tear to your eye. When the catheter is at the back of your throat it will tickle slightly and may make some people gag. The catheter can go the “wrong way” meaning that it starts to pass into your mouth or breathing passage (trachea) but this does not happen often. Even if it does it is very unlikely to cause any damage and the catheter is simply withdrawn slightly and then reinserted. Once the catheter is beyond the back of your throat the tip will be passed as far as your stomach. You will not feel anything lower down in your oesophagus or stomach. Once the catheter is in place it is not moved again for a few minutes and usually feels less uncomfortable.

You will be asked to lie on a couch while the measurements are being performed. During the test you will be asked to swallow some water, which will help us to determine where the catheter is lying in the oesophagus and to record the muscular movements when you swallow. Once the test is completed the catheter will be removed. This catheter will be in place for approximately 10 minutes.

A different catheter for measuring pH (or pH and impedance) is then inserted into your oesophagus in the same way as before. Once in place this is secured using tape to your nose, neck and chest to keep it secure and out of the way. It is normally placed inside your upper clothing to help with this.

The end is attached to a monitor similar to an MP3 player or “Walkman” and worn in a case with a shoulder strap. You will go home with this and will need to return approximately 24 hours later to have it removed.

You should be finished no more than 1½ hours after your appointment time.

Does it hurt?

The catheters do feel a little uncomfortable but should not be painful.

Preparing for your test

Ideally your stomach should be empty and so you should NOT EAT for at least 4 hours before this test and should avoid eating a large meal prior to this. You may drink water if thirsty. If you suffer from diabetes or any condition where fasting may be difficult please contact us to discuss this.

Who performs the test?

An experienced Medical Physicist who is accredited by the British Society for Gastroenterology will perform the test, usually assisted by a Radiology Department assistant.

Will the results be explained to me?

Yes, if you like. The information recorded will need some analysis but the person who does the test should be able to give you some idea of whether anything in particular has been shown by either of the tests.

How soon will my referring doctor receive my results?

Your doctor will normally be sent the results of these tests within one week. He or she will discuss the results of the test with you when you next attend their clinic.

Where can I get further advice or information, or change /cancel an appointment?

If you need further advice or want to make changes to your appointment, please contact the Medical Physics Department on **0300 019 4569**, 9am-5pm, Monday to Friday.

More detailed information is available in our waiting area. Or you could visit the following websites:



You can visit the University Hospitals Dorset Website: www.uhd.nhs.uk or read the patient information available in the Medical Physics waiting area before your test.

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