



Sandwell and West Birmingham
NHS Trust

High Resolution Oesophageal Manometry

Information and advice for patients

GI Physiology



What is the test?

Your consultant has requested that you have tests that investigate the function of your stomach and oesophagus (food pipe). These tests can help find a cause for your symptoms.

We do understand that you may have concerns about having this type of test and we would like to reassure you that all tests are conducted in a quiet private room and the scientist performing your test will ensure comfort is maintained at all times.

What is the oesophagus?

The oesophagus (food pipe) connects your throat to your stomach. At the top and bottom of the oesophagus are valves. When you swallow, these valves should relax to allow food through. The muscles in your oesophagus also contract, pushing food down. Following swallowing these valves should close to prevent food and stomach acid flowing back into your oesophagus.

Any problems with the way the valves relax or the muscle action in the oesophagus can cause symptoms such as difficulty swallowing, heartburn, regurgitation, and chest pain.

What is High Resolution Oesophageal Manometry?

High Resolution Oesophageal manometry assesses how well the muscles of the oesophagus are working when you swallow. It also checks the relaxation of the valves at the top and bottom of the oesophagus.

The equipment used to assess these is called a manometry catheter. This is a tube about the thickness of a straw which has many pressure sensors down its length. These sensors measure the pressure of the oesophageal muscles when they contract. The results of this are displayed on a computer screen which allows the scientist to see why you may be getting your symptoms.

You cannot be put to sleep or sedated during the procedure. The catheter is gently passed into your nose, and you will drink water through a straw to help the tube pass into your stomach. Once the tube is in place it will be taped in place at your nose, and you may feel a 'lump' sensation in your throat. This is not painful, and any discomfort should settle quickly. You will be able to breath normally throughout the test.

The procedure will then begin, and we will then give you small measured (5ml) sips of water to swallow. Following this we will ask you to eat solid foods. For this we use a sandwich.

If you are unable to eat a sandwich or would prefer to bring your own food, please do so.

If you have any foods that you have difficulty swallowing, or that trigger symptoms please bring them to the appointment. You will be asked to eat these to try and trigger your symptoms so we can obtain more personalised results.

What are the benefits?

The tests investigate the function of your stomach and oesophagus (food pipe) and can help find a cause for your symptoms.

What are the risks?

As with all procedures there are risks. In some people the test may cause dizziness or fainting. There is also an extremely small risk of bleeding or perforation of the oesophagus.

Are there any alternatives to this test?

These tests are considered the gold standard tests. A barium examination may give some of the information which related to your condition, but these tests are not considered the best way of confirming that your symptoms relate to your oesophagus.

Preparing for the test

- You should previously have had an endoscopy or barium swallow prior to the tests. If this is not the case, please contact the Department as we may have to postpone the tests until one of these have been performed.
- Certain medications can affect the tests therefore it is important that you follow the instructions listed in your appointment letter.
- It is important that you do not eat or drink for 4 hours before your test
- It is not necessary for you to be accompanied unless you have a condition which requires this. If friends or family do accompany you then they will be asked to stay in the waiting area whilst you undergo the tests
- You will be asked to read and complete a consent form before having the tests. If you are happy and fully understand the information given to you, you may sign the form. However, should you have any further questions the person performing the test will be happy to discuss these with you.

Where do I go?

The department is located at Sandwell Hospital in Clinic 6B of the Outpatients building on the 1st floor. On your arrival, please check in at the Endoscopy Unit Reception desk. You will be asked to take a seat in the Clinic 6B waiting area. The scientist performing the test will then take you into a private room and discuss the test with you.

During the test

What should I expect?

- We will explain the tests in full and ask you to sign a consent form. This is important as we must seek your consent for any treatment or procedure beforehand. The scientist will explain the risks, benefits, and alternatives before they ask for your consent. If you are unsure about any aspect of the tests proposed, please ask for more information and the scientist will be happy to provide this.
- You will be asked to sit on a couch and the catheters will be inserted as previously stated.
- The tests usually take approximately 60 minutes from start to finish.

After the test

Following the removal of the catheter you will be able to go home. You do not need to be accompanied and your ability to drive will not be affected. You will be able to go straight back to your normal routine.

Follow-up

Following the tests your recordings will be analysed and the results passed onto the consultant who referred you for the tests. These results are usually sent to the consultant within 2 weeks of the test. Once they have received these results, they will discuss and explain the results to you.

Contact details

If you have any questions about the tests, please contact the GI Physiology Department on: 0121 507 2490

The department is open Monday – Friday 8am to 4pm.

Sources used for the information in this leaflet

British Society of Gastroenterology (2019) British Society of Gastroenterology guidelines for oesophageal manometry and oesophageal reflux monitoring. Trudgill, N et al. [Accessed 12th March 2024].

Further information

- Heartburn and acid reflux: <https://www.nhs.uk/conditions/heartburn-and-acid-reflux/>
- Heartburn and gastro-oesophageal reflux: <https://gutscharity.org.uk/advice-and-information/symptoms/heartburn-and-reflux/>

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