



University Hospitals Birmingham
NHS Foundation Trust



Oesophageal manometry and 24-hour pH monitoring

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Instructions for oesophageal manometry and 24-hour pH monitoring

Prior to the test:

Please do not eat or drink for three hours before test (unless you are **diabetic** then please eat as normal).

If you should suffer with asthma, please continue to use your inhalers as directed by your GP.

If you take medication for your heart, please continue to take this as directed by your GP.

Please **stop** taking the following **antacid medication seven days** prior to the tests:

Losec (Omeprazole)

Protium (Pantoprazole)

Zoton (Lansoprazole)

Pariet (Rabeprazole)

Nexium (Esomeprazole)

Axid (Nizatidine)

Please **stop** taking the following **medication three days** prior to the tests:

Zantac (Ranitidine)

Maxalon (Metaclopramide)

Tagamet (Cimetidine)

Cisapride (Prepulsid)

Motilium (Domperidone)

Please **stop** taking the following **medication 24 hours** prior to the tests:

Gaviscon

Tums

Mucogel

Algicon

Rennies

Maalox

Buscopan

Spasmonal

Bisodol

Nifedipine

Asilone

Topal

Or any simple antacid preparations from your local pharmacy.

Oesophageal manometry and 24-hour pH monitoring

You have been asked to attend an appointment at hospital to have some tests carried out to investigate the functioning of your stomach and oesophagus (gullet). The tests will take approximately 30 minutes.

What is the oesophagus?

The oesophagus is a long muscular tube which connects the mouth to the stomach. Between the lower end of the oesophagus and the stomach there is a special sphincter muscle (a valve). The valve opens to allow food and drink to pass into the stomach but then closes again to prevent the stomach contents regurgitating (refluxing) back in to the oesophagus.

What is the function of the oesophagus?

Its function is to pass chewed food and liquids from the mouth to the stomach by progressive muscular contractions.

TEST 1 – oesophageal manometry

What is the test for?

The test is used to check that the nerves and muscles of the oesophagus are functioning properly. The test will also check that the valve at the top of the stomach is of normal pressure and opens and closes correctly.

How is the test carried out?

Your nostril will be sprayed with a short lasting freezing agent to stop you sneezing and minimise discomfort.

A thin tube is passed gently around the inside of your nose. You will then be asked to drink a beaker of water through

a straw, this will help the tube to move through the throat and down the oesophagus into the stomach.

You will be able to breathe normally at all times during the procedure.

Once the tube is in place you will feel a 'lump' sensation in your throat. It is not painful, just a little uncomfortable and should settle down quite quickly.

You will then be asked to lie down on your back on a couch with one pillow.

In order to measure the muscles of the oesophagus, we will attach the other end of the tube to a recorder for a period of 10 minutes. You will be asked to be still and quiet with relaxed breathing.

You will also be asked to swallow small mouthfuls of water at regular intervals until the test is complete.

TEST 2 – 24-hour pH (acid) monitoring

What is the test for?

This test allows us to measure the amount and severity of acidic stomach contents that may be leaking up from the stomach into the oesophagus.

These measurements are taken for a 24-hour period so that we can see what happens after your meals and at night when you are asleep.

The test will also show us how well your symptoms are related to the presence of acid in your oesophagus.

How is the test carried out?

Your nostril will be sprayed again with a short lasting freezing agent to stop you sneezing and minimise discomfort.

A thin tube with a small probe on the end is gently passed

through your nose. You will be asked to drink a beaker of water through a straw; this will help the tube to move through the throat and down the oesophagus.

You will be able to breathe normally at all times.

Once the tube is in place you will feel a 'lump' sensation in your throat. It is not painful, just a little uncomfortable and should settle down within 30 minutes.

This time the end of the tube will be positioned in the oesophagus, above the stomach.

The tube will be taped securely to the outside of your nose, passed around your ear and attached to a small recording box which is worn on a shoulder strap or on a belt around your waist.

You will be given a set of instructions before you leave and will be asked to fill in a special diary of your meals, bedtime and symptoms.

You will be sent home and be able to eat, sleep and carry out your normal daily routines.

You will return the following day to have the tube removed. Removal of the tube takes a few seconds and is painless.

Who should I contact if I have a query or problem during the 24-hour test?

Before you leave you will be given a 24-hour contact telephone number to speak to a specialist in case you encounter any problems during the test or have any questions.

Frequently asked questions

What is the benefit of having these tests done?

The main benefit of the tests is that the physician has clear documentation of the muscle function of the oesophagus and the degree of acid reflux. Using the information from these tests your physician can plan any treatment that you may require or provide reassurance if the tests are normal.

What are the risks and side effects of these tests?

- Oesophageal manometry and 24-hour acid monitoring tests are generally very safe. The tests may cause slight discomfort in the nose and the throat but should not be painful. The discomfort can be minimised by spraying the nostril with local anaesthetic.
- You may also feel slightly sick when the tube is first positioned in the oesophagus but this should settle down quite quickly.
- Other side effects you may experience when the tube is inserted include a mild sore throat, nosebleed, runny nose, vomiting, fainting or wheezing. However, these side effects can be quickly and easily dealt with at the time.
- There is a very small risk that the probe could damage the oesophagus. However, this is very unlikely as the tube is flexible.
- During the tests, patients are able to eat, sleep and go about their daily activities. However, some prefer not to work because they feel self-conscious about having a tube coming out of their nose.
- If you have any allergies, please inform the GI physiologist who does your test before the test begins.
- Please inform your GI physiologist by telephone if you are pregnant, prior to your appointment.

Are there alternatives to oesophageal manometry and 24-hour acid monitoring?

Nothing can take the place of oesophageal manometry and 24-hour acid monitoring. However, other studies are used to investigate other aspects of oesophageal function, the results of which will provide complementary information. For example, an endoscopy can be carried out to view the lining of the oesophagus or a barium swallow will allow viewing of the anatomy of the swallowing muscles and oesophagus.

Will the test be painful?

The tests are not painful and you will not need sedation. However you will have the feeling of a 'lump' sensation in your throat whilst the tube for each test is in position. Your throat may feel slightly rough or uncomfortable for a short time after the test. This can be eased by gargling with salty water.

Is the probe safe?

Please do not worry, the probe is very small and safe. Even if you sneeze, cough or vomit, the probe will not come out.

Are there any special instructions for after the tests?

- You may go back to your normal routine
- You will be able to drive afterwards if you wish
- You can eat and drink as normal
- When you have returned after 24 hours to have the second tube removed you may restart any medication that we may have asked you to stop

When will I get my results?

The readings of your tests will be analysed by your physiologist (an expert in how the body functions) and the results will be sent to your consultant. Your consultant will then discuss the results with you at your next clinic appointment.



The Trust provides free monthly health talks on a variety of medical conditions and treatments. For more information visit www.uhb.nhs.uk/health-talks.htm or call 0121 371 4323.

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