

Barium meal



What is a barium meal?

Your doctor has asked us to perform a barium examination of your stomach to help find the cause of your symptoms. This is called a barium meal, which is a test using X-rays and barium liquid to get X-ray images of your oesophagus (gullet), stomach and duodenum (the beginning of your small intestine, the passageway that takes food away from your stomach). Barium is a chalky white fluid that coats the lining of the stomach to make it show up on the X-ray films.

What is it for?

Your doctor may suggest this examination if you are having difficulty swallowing, if you have chest pain or reflux (backflow of stomach juices into the lower part of the oesophagus), or if you are having unexplained vomiting, pain in your abdomen, severe indigestion or blood in your stool (which may be coming from your stomach or duodenum or elsewhere in your digestive system).

This test will help your doctor to diagnose inflammation, ulcers, tumours or polyps in your stomach or duodenum.

Are there any alternatives?

An alternative to a barium meal is an upper gastrointestinal (GI) endoscopy (OGD). This uses a flexible telescope to look into the oesophagus, stomach and duodenum. A barium meal is usually performed if you have opted not to have an OGD, or are unfit for OGD.

What will happen if I don't have the examination?

Your doctor will be unable to diagnose and treat the cause of your symptoms.

How do I prepare for my barium meal?

It is very important that your stomach and small intestine are empty for this examination. Food particles in the gut can make it difficult to read the X-rays. You must not eat or drink anything from midnight the night before.

If you usually take medicines in the morning, do not take any dose(s) on the morning of or before your test. You can resume your medication after the test.

Diabetic patients with any queries should contact the Diabetic Centre directly on: 01872 254560 between 9.00am and 10.00am Monday to Friday.

Who will I see?

Usually a small team, including a radiologist, a radiographer and perhaps a nurse, will care for you during this examination. Whoever is doing the examination will watch a television screen at the time, and take separate X-ray films. Later on the radiologist or specialist radiographer will review the X-ray images and issue a report.

What will happen?

When you arrive for your examination, you will need to change into a gown. For your own comfort, you may prefer to bring your own dressing gown and slippers.

You will be taken into the X-ray room and asked to take off the dressing gown but keep on the hospital gown. You may be asked to swallow some powders followed by a liquid. This mixture produces gas to distend (blow up) your stomach, which allows greater detail to show up on the X-rays. Please try not to burp, so that the gas remains in your stomach until after the X-rays have been taken. You will also be asked to drink a cup of barium liquid, which has a chalky texture.

You may be given an injection into your arm to relax the muscles of your stomach and stop it moving on the X-ray films. You will be asked to move into different positions on the X-ray table to coat your stomach with the barium. The radiologist or specialist radiographer will watch the monitor and take X-ray images of your stomach. You will be asked to hold your breath while the images are taken.

If you think you will have trouble moving about on the X-ray table, please tell us as soon as possible so we can make suitable arrangements to help you.

Will it be uncomfortable?

You might feel a very slight discomfort from your stomach being full of air, as if you have had a fizzy drink.

If you have the injection, you will feel some minor discomfort from the pinprick of the needle. The injection may also cause your mouth to become dry and there is a possibility that your eyesight may blur for 30 minutes or so.

How long will it take?

The examination should take about 10 to 15 minutes.

Following your examination?

When your examination is finished, we will advise you that you can dress and leave the department. **We recommend that you bring some food (such as a sandwich or some biscuits) and a drink to have after your examination.**

Are there any after-effects?

You may continue to feel slightly bloated for a short while until the air in your stomach works its way out. You will be able to eat and drink as normal straight away. For the first day or so, you should drink plenty of fluids to help the barium pass out of your system. You may feel slightly constipated for a few days afterwards; you can ease this by taking a mild laxative.

Your stools will look white and remain discoloured for the next day or so. Barium stools are sometimes difficult to flush from the toilet pan and may need repeat flushing.

If you had the stomach-relaxing injection, you may experience some blurring of your vision. This blurring passes off quite quickly and your vision should soon return to normal. Although you may drive yourself home, you should not drive until the effects have worn off. Otherwise, you should be able to return to your normal lifestyle and work straight away.

Are there any risks?

All X-ray procedures involve exposure to radiation in varying amounts, which may add very slightly to the risk of developing cancer. The length and level of exposure to radiation from X-rays in medical procedures is strictly controlled and kept to the minimum possible.

For a barium meal, you will be exposed to radiation for several minutes. This equals about the same amount of background radiation that you will receive naturally from the environment over 12 to 18 months. There is a far greater risk from missing a serious disorder by not having this investigation.

There is also an extremely small risk that the injection given to you will have a delayed effect on the eye, causing pain and blurred vision. It is important to seek urgent medical advice if this occurs. Blurring of vision for a short time after the injection is normal but should soon pass.

When will I get my results?

You will not be told the results of your examination whilst you are in the department. We will review your X-ray films, then send your results to the doctor who requested the examination as soon as possible. This may take some time to reach your referring doctor, but is normally available in less than 14 days. You could ask the radiographer or radiologist for some indication of timing.

You should receive an appointment to see the doctor again, if you do not already have one booked.

Further information

If you have any questions about your examination, or need any further information, please do not hesitate to contact us at the Radiography department on: 01872 252338.

If you need to change your appointment, contact the X-ray appointment clerk:

Royal Cornwall Hospital, Truro 01872 252290

If you would like this leaflet in large print, braille, audio version or in another language, please contact the General Office on 01872 252690

