



Information for patients having a barium meal

About this leaflet

The leaflet tells you about having a barium meal. It explains what is involved and what the possible risks are. It is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you for the test or the department which is going to perform it.

Whether you are having a barium meal as a planned or as an emergency procedure, you should have sufficient explanation before the procedure begins.

The radiology department

The radiology department may also be called the X-ray or imaging department. It is the facility in the hospital where radiological examinations of patients are carried out, using a range of equipment, such as a CT (computed tomography) scanner, an ultrasound machine and an MRI (magnetic resonance imaging) scanner.

Radiologists are doctors trained to interpret the images and carry out more complex examinations. They are supported by radiographers who are trained professionals and carry out X-rays and other imaging procedures.

What is a barium meal?

The stomach, like other parts of the gut, does not show up well on ordinary X-rays; for example, to allow a radiologist to diagnose small ulcers. However, if the lining of the stomach is coated with barium, a white liquid which shows up on X-rays, and if the stomach is also distended by extra gas which shows up black, then much greater detail is obtained. This is called a barium meal. In addition, the radiologist may examine your gullet (oesophagus) at the same time.

Are there any risks?

All X-ray procedures involve exposure to radiation in varying amounts. Although we are exposed to small amounts of background radiation from the environment throughout our lives, large amounts of radiation, either in one go or cumulatively, can 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.

In this procedure you will need to be exposed to radiation for several minutes. This means you will be subject to an amount of radiation comparable to that which we receive naturally from the environment over a period of 12 to 18 months.

There is also some slight risk if you are given an injection of Hyoscine Butylbromide (a muscle relaxant) to relax the stomach. The radiologist or radiographer will ask you if you have any history of glaucoma before giving you this injection, in which case a different injection may be given.

The risks from missing a serious disorder by *not* having this investigation are considerably greater

Are you required to make any special preparations?

Yes, this is most important. You should receive an accompanying leaflet that contains specific instructions about what and when you may eat beforehand, and if you need to take any medicine before coming to the hospital.

In general, your stomach and small intestine need to be empty for this examination to be successful. Therefore, you must not eat or drink anything for several hours beforehand. If you usually take medicines in the morning, do not take your morning dose(s), but bring your medicines to the department with you, and talk to the doctor there about it.



If you fail to follow these instructions, you will not be able to have the examination and another appointment will have to be made, which will delay your diagnosis.

If you are diabetic

If you take insulin or tablets, you need to make sure you have enough to eat on the day before your appointment to prevent low blood sugars and you should follow the advice given by the radiology department (usually in an accompanying leaflet).

If you are pregnant

This examination is not advisable for pregnant women, unless there are exceptional circumstances. Please advise the department in advance if you think you are, or might be, pregnant.

Can you bring a relative or friend?

Yes, but for reasons of safety, they may not be able to accompany you into the examination room, except in exceptional circumstances.

When you arrive

You should go to the reception desk in the department, after which you will be shown where to wait until collected by a radiographer or other member of staff.

You will be shown to a private cubicle where you can undress. Watches can generally still be worn during the examination, but necklaces will need to be removed. Ideally give your valuables, such as keys and credit cards, to a friend to look after or leave at home. Please tell the radiographer of any jewellery you cannot remove. It is generally better not to wear expensive jewellery when attending for your appointment.

You will be asked to put on the hospital gown and dressing gown provided. However, you may prefer to bring your own dressing gown if you wish. You will be asked to place your clothes and personal items in a locker or a basket, which you will keep with you.

Who will you see?

You will usually be cared for by a small team including a radiologist or a radiographer and perhaps a nurse. Whoever is doing the examination will be watching a screen at the time and taking separate X-ray films. A radiologist will subsequently examine the record of the images before writing a report on the findings.

What happens during the investigation?

You will be taken into the X-ray room and asked to take off the dressing gown but keep on the hospital gown. You will be asked to lie on the X-ray couch on your left side, propped up by your left elbow and drink from a beaker containing the barium – a sticky white liquid which is mildly fruit flavoured. This coats the lining of the stomach so that it shows up on the monitor and on the X-ray films. You will then be asked to swallow a dessert spoon of granules followed by a dessert spoon of liquid. This temporarily enlarges your stomach and will make you feel as though you have had a fizzy drink. You may be given an injection, generally of Hyoscine Butylbromide, to relax the muscles of the bowel wall and make the examination easier. The radiographer will give this routinely at the start of the procedure, unless you have a history of glaucoma, in which case you will be given an injection of glucagon instead. This may blur your eyesight for 30 minutes or so.

After an initial assessment with the X-ray machine, you will be asked to roll onto your stomach then onto your back again. This allows complete coating of the stomach. The radiologist or senior radiographer watches on the screen and also takes pictures, moving you into different positions. The table will then be tilted into the upright position and you will be asked to drink more barium in order for the oesophagus to be examined.



How long will it take?

This whole process should take about 15 minutes. After this, you should be free to dress and leave the department.

Will it be uncomfortable?

You will feel some minor discomfort from the injection, if you have it. You might feel a very slight discomfort from your stomach being full of air.

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 normally straight away and, for the first day or so, you should drink plenty of fluids to help the barium pass out of your system. Your stools will look white and remain discoloured for the next day or so. Some people may get slightly constipated and taking a mild laxative should help in this case. Barium stools are sometimes difficult to flush from the toilet and may need repeat flushing.

If you had the stomach-relaxing injection, you must be certain that your eyesight has returned to normal before driving your car. Otherwise you should be able to return to your normal lifestyle and work straight away.

When will you get the results?

The scan will be examined after your visit and a written report on the findings sent to your referring doctor. This is normally available in 14 days.

Finally

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

Further Information

For general information about radiology departments, visit The Royal College of Radiologists' website: www.goingfora.com

Local information

X-ray appointments office – 01493 453659

Radiology Nurses – 01493 452099

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The hospital is able to arrange for an interpreter to assist you in communicating effectively with staff during your stay through INTRAN.

If you need an interpreter or a person to sign, please let us know.

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version of this booklet,
please contact PALS on
01493 453240**