

**Patient  
Information**

# Adults having a barium swallow, barium meal or barium follow through X-ray

## Introduction

This leaflet will give you general information about having a barium meal or barium follow through X-ray and answer some of the commonly asked questions.

## The digestive system

Our digestive system provides us with one of the essential functions of life and nutrition. This helps to give us energy and provides our body with building blocks from which to create new body cells. The digestive system is like a tube which extends from the mouth to the rectum (back passage).

If you are having problems with your oesophagus (upper gullet), stomach or small intestine you may be referred for a barium X-ray.

## What is a barium swallow, a barium meal and barium follow-through?

These are X-ray examinations which involve you drinking some barium to help us to get pictures (images) of your upper digestive system.

## What is barium and why is it used during X-ray examinations?

The upper digestive system does not show up well on ordinary X-ray images but will if coated by barium, a liquid suspension of barium sulphate.

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Department

**Radiology**

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**April 2022**

**Patient  
Information**

## Types of barium tests

Depending on which part of your digestive system is being looked at, you may have one or more of the examinations listed in the next section. In each test, the barium coats the lining of the bowel and helps distend (expand) it so abnormalities in the lining or structure of the digestive system can be seen.

### Barium swallow

This procedure is used to examine the throat and oesophagus. You will be asked to drink some barium liquid while standing in front of an X-ray machine so that images can be taken as you swallow. The test normally takes no longer than 10 minutes.

### Barium meal

This is similar to a barium swallow but aims to look for problems in the stomach and duodenum. You will be asked to drink some barium liquid and then lie on a couch while X-ray images are taken of your stomach. This procedure may take a little longer than a barium swallow.

The barium is used to coat the lining of the stomach. You may be asked to swallow some fizzy powder, like sherbet, which gives off gas in your stomach. This will expand your stomach and make the detail on the X-ray clearer.

You may also be given an injection into a vein, in your arm, of a substance which relaxes the muscle wall of the stomach. Several images will be taken while you are in different positions on the X-ray couch.

### Barium follow-through

This examination is similar to a barium meal but aims to look for problems in the small intestine. You will be given a drink of barium but you will then need to wait 10 to 15 minutes before any X-rays are taken. This is to allow time for the barium to reach the small intestine. X-rays are then taken at regular intervals until the barium has gone through all of the small intestine. You may be in the department for 2 to 3 hours.

**Patient  
Information****Are there any risks?**

X-ray examinations of the oesophagus, stomach and small bowel carry certain risks. The length of time and level of X-rays are kept to a minimum, but you do need to be exposed to X-rays for a total of 2 to 3 minutes. This means you are exposed to a quantity of radiation equivalent to the amount we all receive naturally from the atmosphere over a period of about 12 to 18 months.

You may be given an injection into a vein, in your arm, of a substance which relaxes the stomach muscles (Buscopan®). This will make the examination more comfortable and has very little risk.

Your doctor believes that the risk from missing a disorder by not having the examination is greater than the amount of radiation you will be exposed to.

**Do I need to make any special preparations?**

Yes, this is important. Your appointment letter contains specific instructions about what and when you may eat or drink before the examination, and if you need to take any medicine before attending. If these instructions are not followed we may not be able to go ahead with the examination.

If possible, please attend the department wearing a top without zips, buttons, sequins or metallic objects (including undergarments). There are limited changing areas within the department, however coming prepared helps us to keep our appointments on time.

**Can I bring a relative/friend?**

Yes, but for reasons of safety they will not be able to accompany you into the X-ray room, except in special circumstances.

We cannot take responsibility for children under the age of 16 while you are having your examination. If you do not have child care on the date of your appointment please phone the number on your letter so that we can rearrange your appointment.

**Patient  
Information****On arrival**

If you are diabetic or a female who may be pregnant, please let the radiographer know before the examination.

You will be shown to a changing room if it was not possible for you to remove any jewellery or metallic objects before your arrival at the department.

**Who will I see?**

You will be cared for by a small team including a radiologist and a radiographer and sometimes an assistant. Whoever is doing the examination will be watching a monitor (screen) at all times and taking separate X-rays. After the examination the radiologist will review the X-rays and write a report.

**Will it be uncomfortable?**

You may feel some minor discomfort from the pinprick of the injection. You might also feel a slight discomfort from your stomach being full of air if you have been asked to take some of the fizzy powder.

**Are there any side effects?**

If you have had an injection of Buscopan® you may have a dry mouth for about 10 minutes. Some people have noticed a little blurring of their vision for a short while.

You should wait for up to an hour before driving home, or have someone take you.

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 few days. Some people may get slightly constipated so taking a mild laxative can help. Barium stools are sometimes difficult to flush from the lavatory pan and repeat flushing may be needed.

## When will I get the results?

After the procedure, the images will be examined by the radiologist, who will then write a report on the findings. The results will be sent to your referring doctor.

## Contact information

If you have any other questions, please ring the Imaging/Radiology Department on the number shown on your appointment letter.

### Radiology Department

Gloucestershire Royal Hospital

Tel: 0300 422 5691

Monday to Friday, 9:00 am to 5:00pm

We are pleased that we can offer state of the art technology for diagnosis. However, radiology equipment needs constant updating and there is a charitable fund for this.

If you would like to make a donation, please send a cheque to the address below. Cheques should be made payable to GHNHSFT.

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