



Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Families

# Upper GI contrast study (including barium meal, barium swallow or barium follow through studies)

**This information sheet explains about upper GI contrast studies, which include barium meal, barium swallow or barium follow through studies) what is involved and what to expect when your child comes to Great Ormond Street Hospital (GOSH) to have one. It explains the various types of contrast studies used to examine the upper part of the gastrointestinal or digestive system.**

## What are upper GI contrast studies?

Contrast studies usually use a thick, white liquid called barium that shows up well on x-rays. Sometimes, we use a clear liquid instead that looks like water but tastes a bit like peppermint instead. This also shows up on the X-rays.

The liquid is introduced to your child's digestive system to show how well it is working. It is used to diagnose all types of abnormalities of the digestive system:

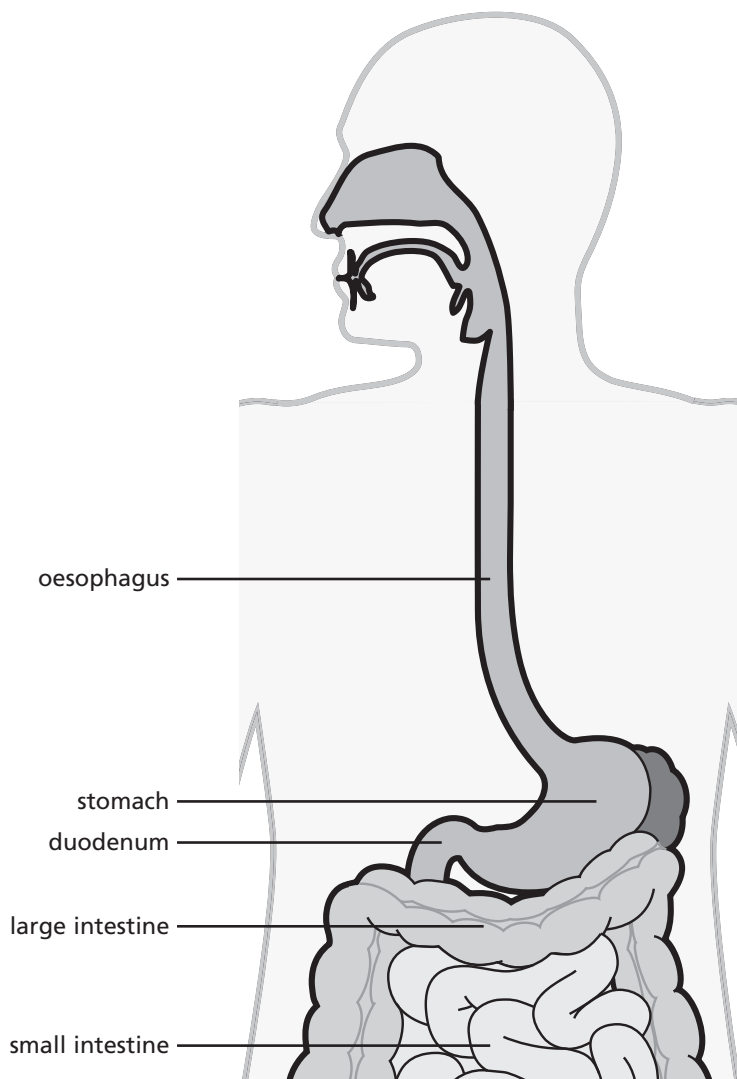
Follow through scans are used to show your child's oesophagus (food pipe) and stomach but mainly the small intestine

Contrast meal scans and contrast swallow scans are used to study the oesophagus (food pipe) and stomach in detail.

The type of scan requested by your doctor depends on your child's age, feeding method and suspected problem.

## Are there any alternatives?

Various types of scan such as CT, ultrasound and x-rays can show the size and shape of your child's digestive system but not how it is working. The results of the scan are used to plan your child's treatment.





## **When you receive your appointment letter**

If you are unable to keep this appointment, please inform the department at least two weeks beforehand. Sometimes, we can offer the appointment to another child on the waiting list. As so many children and young people need to use our services, we have had to introduce a policy where if a child cancels or does not attend two appointments in a row, we will close their referral and inform their GOSH consultant.

## **The day of the scan**

Your child should not have breakfast on the day of the scan and should only drink clear fluids, such as weak squash or water until one hour before the scan. Younger children should not eat any food for two to three hours before the scan. Children who are bottle feeding or breast feeding should not be fed for at least an hour before the test. This ensures that the images taken are of good quality.

If your child has a favourite bottle, beaker cup or cup, please bring it with you so that we can use it to give the contrast liquid.

If your child already has a nasogastric (NG) tube in place, we may use this to put the contrast liquid through.

If your child has a gastrostomy, we may use this to insert the contrast liquid.

Please arrive at the Radiology department at the time stated in your child's appointment letter.

Many of the studies we perform involve the use of x-rays. Legally, we are obliged to ask any girls over the age of 12 whether there is any chance they might be pregnant. This is to protect babies in the womb from receiving unnecessary radiation. We will also ask mothers or other female carers if they could be pregnant, especially if they are planning to come into the scanning room with their child. If you are pregnant, we suggest you bring another member of the family with you, to be with your child during the scan instead.

Your child will need to wear a hospital gown for this test but can keep a vest or t-shirt on underneath. Babygrows with poppers will need to be removed. Any metal on their everyday clothing, such as zips or buttons, will show up on the x-ray, giving a misleading result. You might want to bring some spare clothes in case any of the contrast liquid spills.

## **The scan**

You will be able to stay with your child throughout the scan. If we are using barium, we will mix up the barium solution and give your child a choice of which flavouring to add. We usually have the choice of banana, strawberry and chocolate. Once the solution is mixed, we will ask your child to lie down on the examination bed and drink all the solution while we take some x-ray pictures. You and your child will be able to see the pictures on the screen. This usually takes about 20 minutes.

## **Follow through studies only**

If your child is having a follow through scan, we will usually ask you to wait in the waiting area for a while after they have drunk the contrast liquid. We need to wait quite a long time for the liquid to pass through the stomach to the small intestine. Once pictures have been taken of the small intestine, we may ask you to wait again until the contrast liquid has passed into your child's large intestine. The radiographer will take some more pictures and may need to press gently on your child's tummy to separate all the loops of bowel and give us good pictures with lots of detail. The follow through scan usually takes between one and three hours, depending on how long it takes the contrast liquid to get all the way through the bowel.



## **After the scan**

When enough pictures have been taken, your child will be able to get off the bed and get dressed. If they are not having any further tests or scans, you will be free to go home. The radiology doctor will send a report about the scan to your child's doctor.

## **Are there any risks?**

The barium will not interfere with any medicines your child is taking. It may however cause some constipation in the days that follow the test so your child should drink plenty of fluids. Your child's faeces (poo) may appear white as the barium is passing out of his or her body but this is quite normal.

## **When you get home**

Your child should drink plenty of fluids for the next couple of days to flush the contrast liquid out of their digestive system and prevent any constipation. While x-rays use radiation, the amount in an individual set of pictures is low compared with the background radiation we get from the environment. Each x-ray is calculated so that the best picture can be taken using the minimum amount of radiation.

**If you have any questions,  
please telephone the Radiology  
department on 020 7829 8615**

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Compiled by the Radiology department in collaboration with the Child and Family Information Group  
Great Ormond Street Hospital for Children NHS Foundation Trust, Great Ormond Street, London WC1N 3JH  
[www.gosh.nhs.uk](http://www.gosh.nhs.uk)