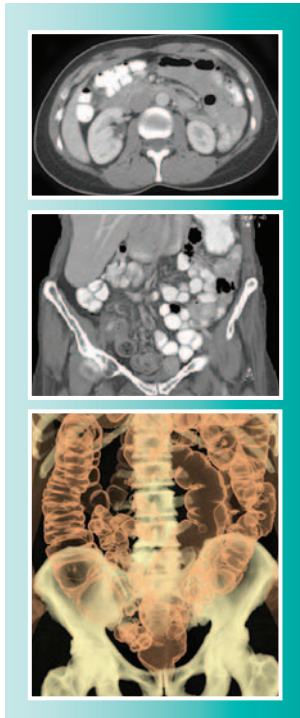


# CT abdomen

with prolonged oral preparation

**i** Information for patients  
Radiology



In hospital and in the community

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## **What is a CT abdomen scan with prolonged oral preparation?**

CT is a short way of saying Computed Tomography.

An abdominal CT scan with prolonged oral preparation is a specialised test to look specifically at your large bowel. It can also look at all your abdominal organs at the same time. Images are taken in 'slices' through your abdomen. These images can then be put together to create a 3D picture of your abdomen and bowel.

## **What does a CT scanner look like?**



A CT scanner looks like a giant polo mint. It is circular with a large hole in the middle and is open at both ends.

During the scan you will be asked to lie on the scan table. The table will move in and out of the scanner as it takes the images.

## **Why do I need a CT scan?**

You will have recently seen your doctor about a medical problem who should have discussed their reason for wanting a CT scan of your abdomen.

Some reasons include:

- Abdominal pain
- Altered bowel habits
- Unexplained weight loss
- Loss of blood/anaemia.

You may have inconclusive or failed tests such as a barium enema or colonoscopy. Or your consultant may feel that you are unable to tolerate these tests.

A CT scan produces very detailed images of your abdomen and may help provide extra information about your condition. If you are unsure why the scan is necessary, it is best to talk to your doctor who will have all your details.

## **Will I need any special preparation for the scan?**

You will need special preparation for this scan so that your large bowel can be visualised well on the scan. When you book your CT scan appointment you will be given a bottle of Omnipaque (an X-ray dye which highlights your bowel). A Radiology nurse will discuss the preparation with you and answer any queries you may have.

- The preparation should be started 2 days before the CT scan appointment.
- The bottle of Omnipaque will contain enough dye to make 5 portions of the drink.
- Dilute 10mls of Omnipaque in 250mls of water (1 portion).

- Drink a portion of the fluid every 12 hours until all 5 have been taken.

Example:

### **2 days before scan:**

- morning (7.00am) - dilute 10mls of Omnipaque in 250mls of water, drink full amount (1st portion)
- afternoon (7.00pm) - drink 2nd portion 12 hours later

### **1 day before scan:**

- morning (7.00am) - drink 3rd portion
- afternoon (7.00pm) - drink 4th portion

### **Day of scan**

- morning (7.00am) - 5th (final) portion
- attend for scan 30 minutes before appointment time to drink extra 1 litre of fluid

## **What will happen when I arrive?**

On arrival in the Radiology department you will need to book in at the main reception. You will have been asked to arrive 30 minutes before your appointment time. A clinical assistant or radiographer will collect you and take you to prepare for your scan.

As well as the preparation you have had at home, you will be asked to drink another litre of fluid immediately before the scan. **Your co-operation is important and drinking the full amount of the preparation drink helps the Radiologist to interpret the scan and will help give more accurate results.**

## Will I need an injection?

You will require an injection of X-ray contrast (dye) which is a liquid that highlights your blood vessels and organs on the scan and helps give more information.

## Who performs my scan?

The person who carries out the scan is called a **radiographer**. They will explain your procedure thoroughly when you come for your appointment.

A **radiologist** (a doctor specially trained in looking at X-rays) will interpret the scan and send the results to your doctor.

## What will happen during the scan?

When it is time for your scan you will be asked to change into a hospital gown, you will then be asked to lie on the scanner table. You will require an injection of X-ray dye. The radiographer will go through the questionnaire you have been asked to complete, to ensure that it is safe to give you the injection. A small needle (cannula) will be placed into your arm to allow the X-ray dye to be administered during the scan. The X-ray dye will not be injected straight away, the radiographer will need to do some planning scans first but will warn you when the dye is being injected.

The radiologist (doctor) reviewing your scan may feel that it would be beneficial to inflate your bowel with air during the scan. This involves a very small rubber tube being inserted into your back passage whilst air is gently pumped in. This should not be a painful experience and will only be performed if the radiologist feels that it will provide valuable information that may otherwise be missed on the scan. However, if you strongly object to having this part of the test performed the rest of the scan can still be carried out.

You will be scanned several times, during which you will move in and out of the scanner. For each scan you will be asked to hold your breath for up to 15 seconds. It is important that you hold your breath and keep still as the motion from breathing and moving causes blurring and can ruin the scan pictures. The CT scanners we use are very fast modern scanners.

## **What happens after the scan?**

Once the scan is complete you will be asked to return to the cubicle to change. As you have been given the injection of X-ray dye during the scan you will be asked to wait in the department for an extra 15 minutes, the cannula will be left in your arm. This is so that we can monitor you to make sure the effects from the injection have worn off and that you feel alright before you leave. Once your cannula has been removed by a member of the CT staff, pressure will need to be applied to the site to prevent bruising. You will then be able to leave the department.

Be careful not to knock the injection area once you have left the department, particularly if you take **aspirin or warfarin** as this can cause the injection area to bleed again. If bleeding occurs apply pressure to the area using a clean cloth or gauze to stop the bleeding and reduce any bruising.

The injection of X-ray dye causes no known effects on the ability to drive or operate machinery. However due to the risk of reaction (see risk section below), patients are advised not to drive or operate machinery for one hour after the injection.

## How long does it take?

The scan itself will take approximately 20 minutes. Please be aware that you will be asked to arrive 30 minutes earlier to drink the fluid before the scan. You will be asked to wait in the department for an extra 15 minutes after the scan. You should anticipate being in the department for 1½ - 2 hours.

**Due to the nature of our workload we often have to perform emergency scans which must be prioritised. Whilst we try to keep to appointment times this may occasionally cause slight delays with routine appointments. We thank you for your patience.**

## Are there any risks?

There are a few risks involved with a CT scan. They include:

**Radiation** - A CT scan uses radiation in the form of X-rays. The amount of radiation used is more than for an ordinary x-ray of the same area but is equal to the amount of natural radiation from the atmosphere we all receive over a few years. This adds very slightly to the risk, for example of developing a cancer, but this risk is very small. The amount of radiation is kept to a minimum to reduce this risk and a CT scan is considered a safe procedure.

The effective dose for an abdominal CT scan is 10 mSv which is equivalent to 4.5 years of background radiation for an adult and this may increase your lifetime risk of cancer by 0.02%.

Your doctor has chosen this test for good reason and feels that the benefit of having the CT scan is greater than the risk from the radiation.

**Radiation, pregnancy and women of childbearing age** - If you are of child bearing age and are still having regular periods we need to know the dates of your last menstrual period. **As this is a CT scan to include your abdomen and pelvis we need to ensure that the first**



**day of your last period is within 10 days of the scan.** This is to ensure that we do not mistakenly irradiate a foetus/unborn baby. You may be asked to book the CT appointment to coincide with these dates, however if you attend for your scan and are outside of these dates you will be asked to take a pregnancy test to ensure you are not pregnant. This is precautionary, but for safety and legal reasons must be done.

**X-rays can be harmful to your unborn baby, it is important to tell the CT staff if you are or think you may be pregnant.**



**Reaction to the injections** - The X-ray dye used for this test contains iodine and it does have some natural side effects, which are:

- Hot flush
- Metallic taste in the mouth
- Sensation of passing water

These usually pass within a few minutes.

We take every precaution to ensure that you will have no adverse effect from the injection, however very occasionally (in less than 0.03% of

cases) patients can have an allergic reaction to the dye. This can manifest itself as an itchy rash, shortness of breath and, in extremely rare cases, swelling of the throat and other body parts.

A reaction to the X-ray dye usually occurs within minutes of the injection, however on rare occasions a reaction may not occur until you have left the scanning department. If you experience a reaction after you have left the department do not hesitate to contact your GP or the local A&E department

**To prevent the occurrence of an allergic reaction, please inform staff of any allergies you may have.**

**Asthma** - On rare occasions the X-ray dye can bring on an asthma attack, if you are asthmatic please remember to bring your inhalers with you.

**Kidney function** - The X-ray dye injection can cause your kidneys to work more slowly, this is only a problem if you already suffer with kidney problems. If you have not had a recent blood test you will need to have one before the scan to check your kidneys are working properly. You should only require a blood test if you are diabetic and taking Metformin (Glucophage), have existing kidneys problems or are aged 65 or over. Your doctor will organise this for you. Depending on these blood results you may need to be hydrated before and after the scan. This can involve drinking 1 litre of water before and after the scan or you may need to come into hospital and be put on a drip for a few hours before and after the scan. Once we receive your blood test results you will be informed if this is necessary for you.

**The short questionnaire you have been asked to complete provides information to help reduce the risk of an allergic reaction and medical problems. Please remember to complete this and hand it in when you attend for your scan.**

## **Shall I continue taking my medication?**

Yes, continue taking any medication unless you are advised otherwise. If you are diabetic and taking Metformin you may need to stop taking this.

**If you are diabetic and taking Metformin please contact the CT scanning department as soon as possible.** Our telephone number is provided on your appointment letter.

## **When will I get my results?**

We cannot give you your results straight away as the radiologist will need time to review your scan pictures in detail. Your results will be sent to the doctor who referred you for the scan. You may have an outpatient appointment booked with your doctor at which you can discuss the results of the scan. If you do not have an appointment booked you will be sent one once your doctor has received the results.

## **Are there any alternative tests?**

Your doctor has referred you for a CT scan because they feel that this is the best test for you however, if you feel unhappy about having a CT scan there may be alternative tests that you can have. You will need to discuss these with the doctor who arranged for you to have the scan.

## **What if I still have some questions?**

After reading this leaflet, if you want to know more or have any concerns you can contact the doctor who referred you for the scan, the CT scanning department or you can ask the radiographer when you arrive for the scan.

If you cannot make your appointment, or have any queries, please contact the CT scanning department. Our telephone number is provided on your appointment letter.

Alternatively you can email:

**Judith.Sugden@sth.nhs.uk**

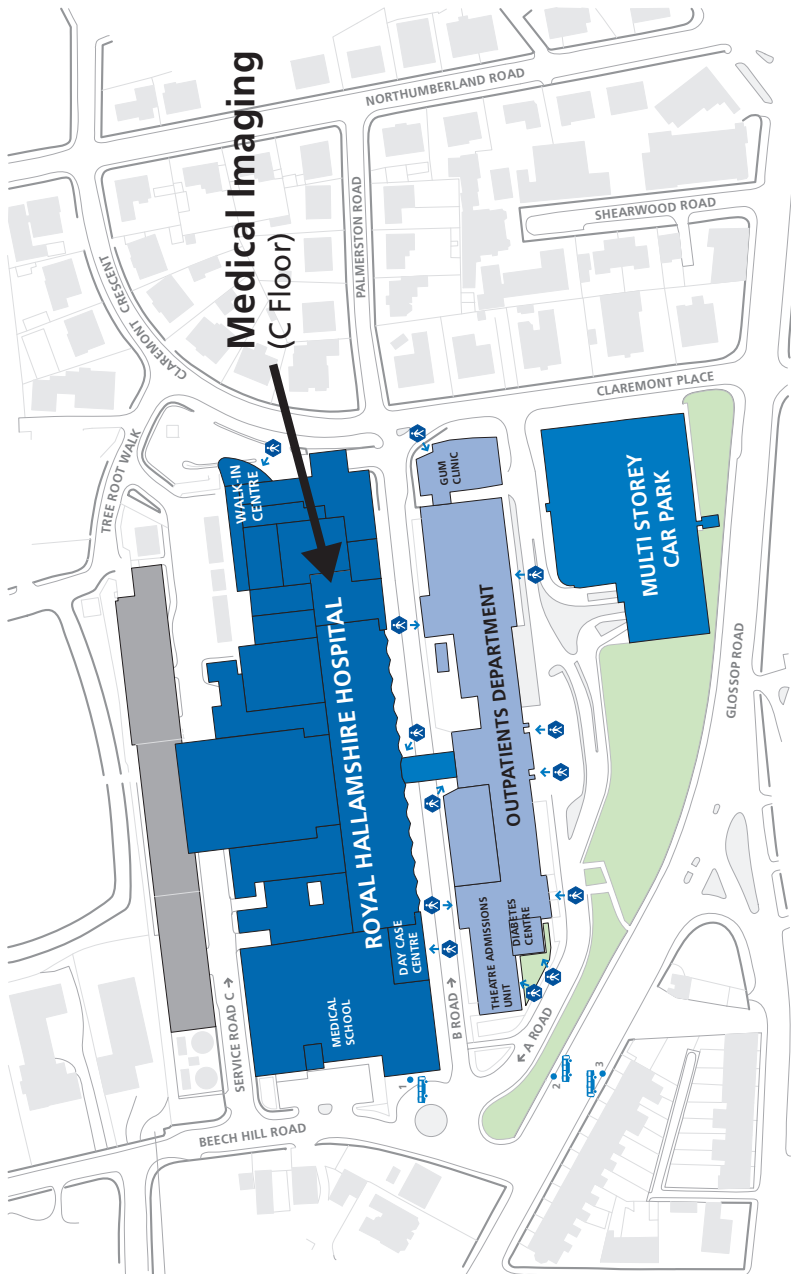
CT & MRI Manager

Sheffield Teaching Hospitals

# Notes

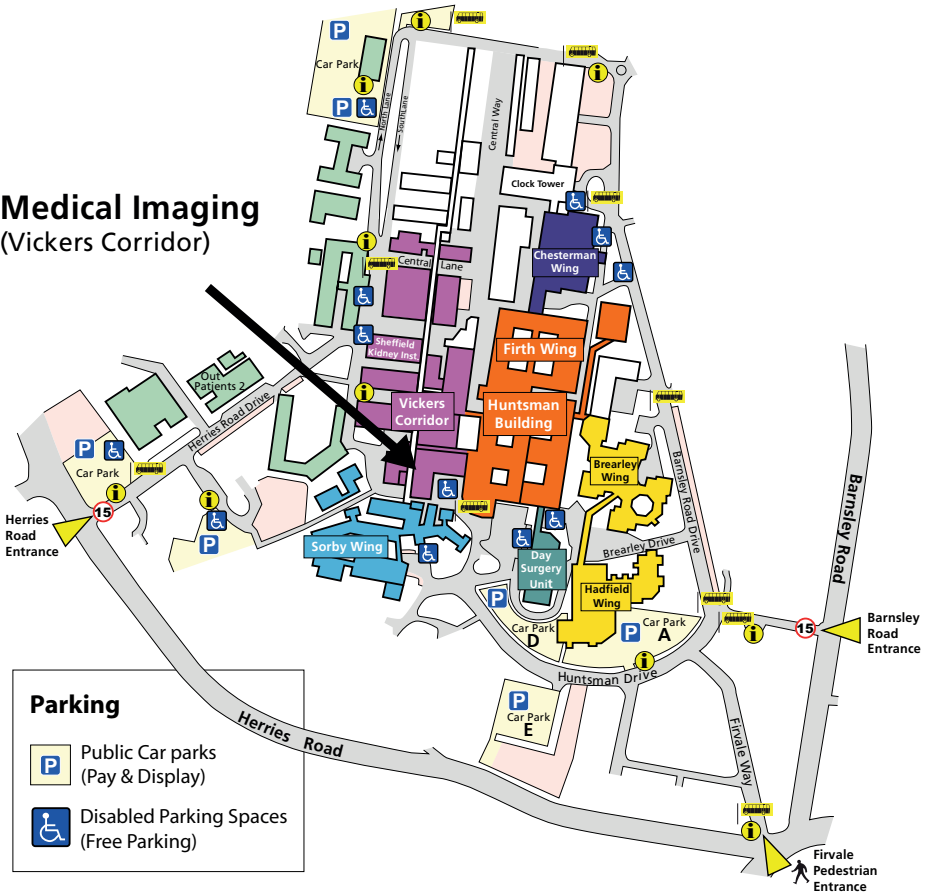
# Notes

# Royal Hallamshire Hospital





# Northern General Hospital

## Medical Imaging (Vickers Corridor)



### Parking

-  Public Car parks (Pay & Display)
-  Disabled Parking Spaces (Free Parking)



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