

Division of Imaging

Information for Patients

Undergoing a CT Scan

What is a CT Scan?

This is a special machine using up to date technology that can produce pictures of the inside of your body using X-rays. The CT scanner is shaped like a large polomint and you will lie on a table, which moves you into the scanner. It is not a tunnel. You will be asked to keep very still whilst you have the scan as movement can blur the images whilst you have the scan as movement can blur the images.



Why are you having a CT Scan?

There are many reasons for having a CT scan.

You may be having an operation and the doctors need a scan in order to plan your treatment.

Sometimes if you are unwell and it is thought you have a collection of infected fluid in your chest or abdomen a CT scan may find where the fluid is to be able to drain it.

If you have had a stroke a CT scan is helpful to determine the type of medication you may require.

How long will I wait for my CT Scan?

Your consultant will make the request for a scan and send it electronically to the department. A consultant radiologist or Senior Radiographer will look at the information to decide how quickly you need to be seen or if another type of scan would be better. You will probably not see the consultant radiologist.

The CT department is open from 8.00 am to 8.00 pm each day and can see up to 100 patients a day. Patients from Accident and Emergency and the Intensive Care Unit are given priority. We will aim to do your scan within a few days, but this may be longer if there are more urgent cases to see first. Very ill patients need to be scanned urgently.

What happens during a CT Scan?

- A trained specialist called a radiographer will perform your CT Scan.
- You may be asked to change into a hospital gown.
- You might be asked to remove certain items of clothing and jewellery.
- The person completing the procedure will ask you to confirm some details including date of birth and pregnancy status.

The radiographer will take you into the scan room and ask you to lie on the CT table. When you are comfortable, the CT table moves very slowly towards the hole in the centre of the 'polo' shaped scanner. It is not a tunnel. The CT scanner makes a relatively loud noise whilst you are being scanned. The scanner will then produce the X-ray 'pictures'.

Sometimes you need a second scan after you have had an injection in your arm to outline the blood vessels. It may make you feel very warm for a few seconds.

The person performing the examination will provide you with instructions on what is needed, and it is often very important that you remain still to ensure the best images are obtained.

Will I feel any pain?

You cannot feel the CT scans so the procedure itself is painless.

However, it is important to get you into the correct position. Holding this position / lying on a table may, for some people, feel uncomfortable, but for the majority of patients this is not the case.

Are there any risks with this examination?

Radiation risk

The use of X-rays may mean that there is a slight increase in the chance of cancer occurring many years after your examination, e.g. 1 in 10,000 for a CT head scan, 1 in 1,000 for a CT abdomen scan.

Although this examination involves the use of X-rays, your doctor will have decided that the benefit of having the scan far outweighs any risks. The dose is equal to the natural radiation we all receive from our surroundings over a period of approximately 1–5 years.

It is also worth noting that these risk levels only represent very small additions to the 1 in 3 chance we all have of getting cancer.

Contrast risk

We might need to give you contrast dye to make areas of your body show up more clearly.

One of the radiology staff will give you this using a small needle inserted into a vein in your arm or the back of your hand.

The radiographers will complete a checklist to ensure it is safe for you to have the dye and you will be asked to sign this form as a consent, the specific side effects are documented on the checklists that you complete.

The contrast dye that is sometimes used can cause allergic reactions however the staff available will be checking for any risks before we proceed.

Extravasation

Contrast dyes (liquids) that are given to patients having a scan are usually given by injection into a vein in your arm or hand.

Occasionally the injection may leak out from your vein into the tissues under the skin – this is known as extravasation.

If this has happened, you may experience a stinging sensation where the contrast has gone into the tissue and it can be painful. This will usually wear off after about 30 minutes.

Preparation for a CT Scan

All the organs in the body look like 'grey blobs' on a CT scan.

If your abdomen is to be scanned the doctor on the ward may ask you to drink lots of water.

Although it may be a lot to drink please try to finish it as it will help us to diagnose your problem.

We might need to put a cannula (plastic tube) in the vein in the back of your hand so that we can inject a clear liquid called a contrast. This will make it easier to see the blood vessels on the scan. If the staff on the ward can do this before you leave it will make your scan much quicker.

If you need this contrast the injection may make you feel warm, particularly in your throat and between your legs.

It can make you feel as if you are passing water but try not to panic because it is only a sensation, and you won't actually be doing it.

You will be asked if you have any allergies and if you have diabetes. These things are important as the answers will determine whether you have the injection or not.

If you are an individual of childbearing capacity up to the age of 55 years you will be asked if there is a chance that you may be pregnant.

If you are not within the first 10 days of your cycle, we may have to organise a pregnancy test to be done prior to the CT scan, as it may be harmful to an unborn baby.

You will be asked to hold your breath during the scans but that is only for about 15 seconds each time

Help and support in the department

If you have any medical problem which you feel may affect your safety in the department, or if you feel you may need any assistance, please let us know when you arrive.

Do I need to give my permission (consent)?

The radiographer will ask you if you are happy for the examination to go ahead. This is called verbal consent and might only involve the radiographer checking you are booked for the correct examination.

If you do not wish to have the examination or are undecided, please ask the radiographer so that they can answer any questions you may have.

Remember, it is your decision. You can change your mind at any time and your wishes will be respected.

However, not having the examination may delay your diagnosis as the referring clinician may not have all the needed information.

How long will it take?

You may be in the department for up to one hour depending on the type of scan you have and when a porter is available to take you back to the ward.

When will I get my results?

We will put a report on the Radiology Information System that the Doctors on the ward can see.

If you have any questions, please ask the CT staff on arrival and we will be happy to answer them. We look forward to seeing you soon.

How can I provide feedback for the appointment I have attended today?

The Division of Imaging welcomes feedback from all our patients. We actively take part in the Friends and Family Test, and we complete a patient experience questionnaire every month to obtain feedback on the experiences you have had. Please speak to a member of staff regarding the feedback or there are posters within the department with QR codes so you can complete these online.

Contact us

Please direct your queries to CT Staff when you arrive or one of the medical staff on the ward.

Language and accessible support services:

If you need an interpreter or information about your care in a different language or format, please get in touch.

Your comments and concerns

If you would like to provide feedback you can:

- Ask to speak to the department lead / manager.
- Write to us: Patient Advice and Liaison Services, 1st Floor, Cobbett House, Manchester Royal Infirmary, Oxford Road, Manchester, M13 9WL.
- Log onto the Patient Opinion website www.patientopinion.org.uk/ click on 'Tell your Story'

If you would like to discuss a concern or make a complaint:

Ask to speak to the department manager – they may be able to help straight away. Inpatients can speak to a senior nurse or manager by contacting the Tell Us Today service on (0161) 701 1999.

Contact our Patient Advice and Liaison Service (PALS) on (0161) 276 8686 email: pals@mft.nhs.uk. Ask for our information leaflet.

We welcome your feedback so we can continue to improve our services.

NHS 111

This service offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.

Telephone: 111, 24 hours a day

Website: www.111.nhs.uk