NHS
Lancashire Teaching Hospitals
NHS Foundation Trust

Information for patients and carers

CT Contrast Scan

This leaflet explains the process of having a CT scan, including the benefits and risks. It also provides information on what to expect when you come to hospital. If you have any further questions please speak to the doctor, radiographer or nurse.

What is a CT scan?

CT stands for Computed Tomography.

A Computerised Tomography (CT) scan uses x-rays and a computer to create detailed images of the inside of your body.

For some scans it may be necessary to give you an injection of an x-ray dye (contrast agent). This dye highlights blood vessels, organs and other structures of the body and helps to improve the quality of the scans.

Why should I have a CT scan?

A CT scan can help your doctor to find the cause of your problem and the best treatment options for you.

Are there any alternatives?

Your doctor feels that a CT scan is the best option for you; a standard x-ray will not provide the same level of detail.

Please inform us before you attend:

- If you are or think you may be pregnant
- If you are breast/chest feeding
- If you weigh over 30 stone/190 kilograms
- If you have problems standing or need a hoist to transfer
- If you have had a previous allergic reaction to x-ray dye (contrast agent)
- If you are allergic to iodine
- If you have been advised or told to restrict your fluid intake
- If you require an interpreter – please inform us as soon as you

receive your appointment letter, and we will arrange an interpreter for you

Can you bring a relative or friend with you?

A relative or friend can accompany you to the hospital, but they will usually not be allowed into the room when you have your examination. Please note that, as we have limited seating and do not have childcare facilities, you are advised not to bring small children with you to your appointment.

How long does it take?

You should plan to be in the CT department for up to 1-2 hours, which will include any preparation time needed for your scan. The scan itself takes between 10 and 20 minutes.

We will try to keep to your appointment time but occasionally we may be required to scan patients urgently at short notice. This means your scan could be delayed, but we will let you know if this is the case.

Preparation for the Scan

Over the 24-hour period before your scan, you should drink a minimum of 2 litres of water. If you are on restricted fluids and unable to drink this amount, please contact the department before your procedure.
If you are taking any medicines, please continue to take these as usual unless you have been told otherwise by your doctor.
When you arrive in the CT department, please book in at the reception desk and take a seat in the waiting area.
Occasionally, you may be asked to drink water or other fluid containing x-ray dye prior to the scan.

Metal fastenings like zips, poppers and hooks and eyes will show up on the scan so we may ask you to change into a hospital gown in the changing rooms before going into the examination room.

What happens during the CT scan?

Your CT scan will be undertaken by a specially trained radiographer.

The scanning machine is like a large ring doughnut similar to this photograph.



Once in the examination room a radiographer will check some details with you and ask you questions about your medical history. This will ensure that it is appropriate for you to undergo the examination and that it is safe to give you the injection of x-ray dye.

You will be asked to lie on your back on the scanner bed, and the radiographer or the radiologist (x-ray doctor) will insert a small cannula into one of your veins, either in your arm or the back of your hand. This allows us to give you the x-ray dye.

During the scan you will need to lie very still, and you may be asked to hold your breath for a moment. The scanner bed moves slowly and slides forwards and backwards through the centre of the CT scanner. Unlike some other scanning machines, the CT scanner is **not** enclosed.

When you are positioned, the radiographers will leave the room, but you will be able to talk to them through an intercom, and they will be able to see you through a glass window.

After the first scan is complete the radiographer will come back into the examination room and connect a thin tube to the end of the cannula they placed in your vein. This allows the x-ray dye to be given through this tube at a specific point during the second scan.

The radiographer will then leave the examination room and begin the second scan. They will inform you when the x-ray dye is being given to you.

Once the scans have been taken the radiographer will check them briefly to ensure that they are of sufficient quality to be able to make a diagnosis. The radiographer will then re-enter the examination room and remove the small needle from your vein. You will then be able to get off the scanner bed and leave the scanning room. Whilst the radiographer can reassure you that the appropriate images have been obtained, they will not be able to give you the results.

Will you feel any pain?

You cannot feel x-rays and the procedure itself is painless. It is important for you to keep still. If you find it uncomfortable to lie still, then please tell the radiographer. When the x-ray dye is injected during your scan, it may give you a metallic taste in your mouth. It may also give you a hot ‘flush’ sensation, and some patients feel as though they want to pass water. Please be aware these are all very common side effects and will only last a short period of time.

After the scan

We will ask you to wait for 15 minutes after the scan before you leave the department. This is to ensure that there are no signs of delayed allergic reaction to the x-ray dye you have been given.

We advise that you drink plenty of fluids over the following 24 hours to help flush the x-ray dye out of your body; you will not notice the x-ray dye leaving your body and it will be passed in your urine.

Are there any risks?

A very small number of patients have an allergic reaction to the x-ray dye. This can be minor, severe, or even life threatening but the chances of this occurring are very rare. Before your examination begins the radiographer will ask you a series of questions about your medical history, including any allergies you may have. This will help us assess if you are at risk of an allergic reaction to the x-ray dye.

Occasionally, there is a small risk that the injection of dye can leak out under the skin instead of in the vein.

If this does happen, then further advice will be given by the radiographer at the time of your examination.

There are some small risks involved with the radiation received during a CT scan but only the minimum amount of radiation is used to produce the images required. We use the smallest dose possible, in line with national regulations. This allows us to make an accurate diagnosis to help plan your care. Your clinician has determined that the benefits of having the CT examination far outweigh the radiation dose you will receive.

When will I receive the examination results?

Following your CT examination, the radiologist will review the scans and write a formal report of the results. This will be sent to the clinician who referred you for this examination.

During your examination, the radiographer will advise you on how you will receive these results. Unfortunately, you will not receive any results at the time of your examination.

Contact details

Should you require further advice or information please contact CT appointments on **01257 247793 / 01257 247785.**

Lines are open 8.30am to 4.30pm Monday to Friday (excluding Bank Holidays).

Sources of further information

www.lancsteachinghospitals.nhs.uk
www.nhs.uk
www.accessable.co.uk
www.patient.co.uk
www.lancsteachinghospitals.nhs.uk/veteran-aware
https://bepartofresearch.nihr.ac.uk/
www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice/exposure-to-ionising-radiation-from-medical-imaging-safety-advice
www.nhs.uk/conditions/CT-Scan/

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www.lancsteachinghospitals.nhs.uk/patient-information-leaflets

Lancashire Teaching Hospitals is a smoke-free site. Smoking is not permitted anywhere on any of our premises, either inside or outside the buildings. Our staff will ask you about your smoking status when you come to hospital and will offer you support and advice about stopping smoking this will include Nicotine Replacement Therapy to help manage your symptoms of withdrawal and the opportunity to speak to a nurse or advisor from the specialist Tobacco and Alcohol Care Team.

If you want to stop smoking, you can also contact Smokefree Lancashire on Freephone **08081962638**

Please ask a member of staff if you would like help in understanding this information.
This information can be made available in large print, audio, Braille and in other languages.

Our patient information group review our leaflets regularly, if you feel you would like to feedback on this information or to join our reading group please contact us on email address: patientexperienceandinvolvem@LTHTR.nhs.uk

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