

Having a CT scan

This leaflet aims to answer your questions about having a CT scan. It explains the benefits, risks and alternatives, as well as what you can expect when you come to hospital. If you have any further questions, please speak to the doctor, nurse or radiographer caring for you.

What is a CT scan?

CT stands for computerised tomography.

A CT scan takes a series of pictures of your body using X-rays. The pictures show cross sections or slices of your body. They are put together by a computer and can be viewed on a screen. The scan shows a very detailed image of the inside of your body.

What happens during a CT scan?

The scanning machine is like a large doughnut. You will need to lie on a motorised bed. This moves slowly and slides into the centre of the ring until the part of the body to be scanned is within the ring. The X-ray machine within the ring rotates around your body. As it rotates around, the X-ray machine sends thin beams of x-rays through your body, which are detected by the X-ray detectors. Unlike some other scanning machines, the CT scanner is not enclosed.

You will need to lie very still while each picture is taken to avoid blurring the images and you may be asked to hold your breath for a moment. Straps and pillows may be used to help maintain the correct position and to keep you still during the examination.

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 watching you through the glass window.

If we are scanning certain areas of your body, we may need to give you an injection of contrast dye. If you do receive dye during your scan, it may give you a metallic taste in your mouth and a 'hot flush.' Some people feel as though they want to pass water (wet themselves) – don't worry, you won't, it just gives you that feeling. All of these sensations pass in a couple of minutes.

The images are recorded and the radiographer (member of the radiology team trained to carry out scans) will check them briefly to ensure that they are diagnostic (of good enough quality to be used to make a diagnosis). When it is done you will be allowed 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 usually not be able to give you any idea of the results at that time.

How long will it take?

This depends on which part of your body is being scanned but it typically takes between 10 and 20 minutes. Including the preparation that may be needed, you should plan to be in the CT Department for up to two hours. Your appointment letter will give you more details.

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

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.

How can I prepare for the scan?

Sometimes we will advise you not to eat or drink before your scan. Your appointment letter will tell you how long before the scan to stop.

If you are asked to drink prior to your scan you should slowly drink 500ml of water over one hour leading up to your appointment time. This keeps you hydrated and also highlights the bowel if we are imaging your abdomen and pelvis.

If you are taking any medicines, please continue to take these as usual unless you have been told otherwise by your doctor.

If you need an injection of contrast, one of the CT staff will give you this using a small needle inserted into a vein in your arm or the back of your hand.

If you need to bring your children with you, please bring along an adult who can supervise them while your scan is being done. We are unable to offer childcare facilities.

What do I need to wear?

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.

If we are scanning your head, then head coverings, hairbands, grips and earrings will also need to be removed. For certain scans you may need to remove any metallic dentures or hearing aids. Dental fillings will not affect the scan.

Will I feel any pain?

You should not feel any pain during the scan itself. The most difficult part is keeping still. Try to relax as much as possible. If you find it uncomfortable to lie still then please tell the radiographer.

What are the risks?

As with X-rays, CT scans use radiation. The level of radiation used is very small and the benefits of the scan are thought to outweigh any risks.

The contrast dye that is sometimes used contains iodine which some people are allergic to. We will check whether you have had any allergies in the past before your scan. Occasionally if you are having a contrast enhanced CT, there is a small risk that the injection of contrast can leak out under the skin instead of in the vein. If this does happen then further advice will be given to by the radiographer and radiologist at the time of the CT.

If you are, or think you could be, pregnant or have had an allergic reaction to X-ray contrast in the past, then you must tell your doctor. Alternatively, contact CT reception at Guy's Hospital, **t:** 020 7188 5574 or St Thomas' Hospital **t:** 020 7188 5464, Monday to Friday, 9am-5pm.

What happens after the scan?

In most cases, as soon as the scan is finished you can go home, or back to your ward if you are staying in hospital. If you have had a contrast dye injection, we may ask you to wait for 10 minutes before you leave the department. This is to ensure that you are all right and there is no sign of any allergic reaction to the contrast dye you had been given.

You can eat and drink as normal and resume your usual activities straight after the scan.

When will I get the results?

The results will not be given to you immediately. Your CT pictures will be studied by a radiologist and the results will be sent to the doctor who referred you for the scan. They will discuss the results with you and any treatment you may need.

If you are an outpatient please allow two weeks for the results to be sent to your referring doctor. If you are staying in hospital the results will be given to the doctors looking after you on the ward.

Unfortunately it will not be possible for you to receive the results at the time of your scan.

Contact us

If you have any questions or concerns about having a CT scan, please contact the CT reception at Guy's Hospital, **t:** 020 7188 5574 or St Thomas' Hospital, **t:** 020 7188 5464, Monday to Friday, 9am-5pm.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit, **w:** www.guysandstthomas.nhs.uk/leaflets

Pharmacy Medicines Helpline

If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.

t: 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns

For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.

t: 020 7188 8801 (PALS) **e:** pals@gstt.nhs.uk

t: 020 7188 3514 (complaints) **e:** complaints2@gstt.nhs.uk

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.

t: 020 7188 8815 **e:** languagesupport@gstt.nhs.uk

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