



**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 the Queen Square Imaging Centre. If you have any further questions, please speak to the Radiographer caring for you.**

## What is a CT scan?

CT stands for Computed Tomography. A CT scan is a series of pictures of your body, taken using x-rays. The pictures show cross-sections or 'slices' of your body. When these slices are put together by a powerful computer, the scan shows a very detailed image of the inside of your body.

## What happens during a CT scan?

A CT scanner looks like a large doughnut, with an opening which is around 3 feet wide and only about 10 inches deep. You will be asked to lie down (typically on your back) on a motorised bed which then moves slowly into the opening and out the other side. As you pass through the scanner, x-rays are being taken. The x-ray machine sends thin beams of x-rays through your body, which are detected by sensors on the other side. The information then goes to a computer which produces a picture of the structures of the inside of your body.

You will need to lie very still during the scan to avoid blurring the images. You may even be asked to hold your breath for a moment. The Radiographer will leave the room for the scan, but you will be able to talk to them through an intercom, and they will be watching you through a glass window.

Sometimes, we may need to give you an injection of contrast dye during your scan. 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. Each of these sensations pass in a couple of minutes. We have a separate information leaflet about contrast dye which we will share with you if it applies to your scan.

When the scan is complete, and the Radiographer has checked over your images for quality, you will be able to get down from the scanner bed and leave. While the Radiographer can reassure you that the appropriate images have been obtained, they will usually not be able to give you an idea of the results at that time.

## How long will it take?

This depends on which part of your body is being scanned, but you can typically expect to be in the scanner for between 5 and 15 minutes. You should plan to be in the department for around 30 minutes unless we have told you otherwise.



## Why should I have a CT scan?

A CT scan can help your doctor to find the cause of your problem and decide on the best treatment options for you. Your doctor will have performed an analysis of the risks and the benefits of having the scan before referring you.

## Are there any alternatives?

Your doctor has referred you for a CT scan as they feel that this is the best option for you. Often, they will have referred to 'best practice' guidelines when deciding on the most appropriate imaging test to use. Alternatives may be available but may not provide the same level of information. If you would prefer not to have a CT scan, you should discuss this with your doctor.

## How can I prepare for the scan?

If you are taking medicines for diabetes, such as metformin, then these may need to be altered around the time of your scan. We will advise you at the time of booking your appointment if this is the case.

Sometimes we will advise you not to eat or drink before your scan. Conversely, we may occasionally need to ask you to drink a volume of water one hour before your scan and to avoid passing water until the scan is complete. We will advise you accordingly at the time of booking your appointment.

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 to bring your children with you, please bring along an adult who can supervise them while your scan is underway. 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 specific scans, you may need to remove metallic dentures or hearing aids. Dental fillings will not affect the scan.

## Will I feel any pain?

You should not feel any pain or any unpleasant sensations during your scan. We will do our best to make you as comfortable as possible while lying down. If you find it uncomfortable to lie still, then please tell the Radiographer.

## What are the risks?

As with a conventional x-ray, CT scans use radiation. The level of radiation used is minimal and your doctor will have assessed that the benefits of the scan would outweigh any risks. To put the radiation dose from a CT scan into perspective, a typical scan of the head will involve the same exposure a person would expect to receive from naturally occurring background radiation in 8 months.



Radiation experts believe that the likely increase in the risk of cancer from imaging tests is minimal. However, we will only use radiation if there is a good reason, and we will always use the principle of making the dose as low as reasonably achievable.

The contrast dye that is sometimes used contains iodine which some people are allergic to. We will check whether you have any known allergies 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 you by the Radiographer.

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 or contact us using the contact details on this leaflet.

### What happens after the scan?

In most cases, as soon as the scan is finished, you can go home. 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 there is no sign of an allergic reaction to the contrast dye. You can eat and drink as normal and resume your usual activities straight after the scan.

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 within 24 hours. They will discuss the results with you and any treatment you may need.

### Contact Us

If you have any questions or concerns about having a CT scan, please contact the CT department at the Queen Square Imaging Centre on **020 7833 2513**, Monday to Friday between 9am and 5pm.

You may also wish to access further information about CT scans on the NHS website:

<https://www.nhs.uk/conditions/ct-scan/>

**If you need this document translated into a different format (e.g. large print), please contact us directly and we will try our best to meet your needs.**