



**Royal National
Orthopaedic Hospital**
NHS Trust



A Patient's guide to

Having a CT Scan

This leaflet aims to answer any questions you may have in relation to having your CT scan. It will explain what is involved, the benefits and possible risks. It is not meant to replace informed discussion. Your referring doctor will have explained why you need to have a CT scan.

Should you have any further questions please speak to the doctor, nurse or radiographer looking after you.

What does CT stand for?

CT stands for Computed Tomography.

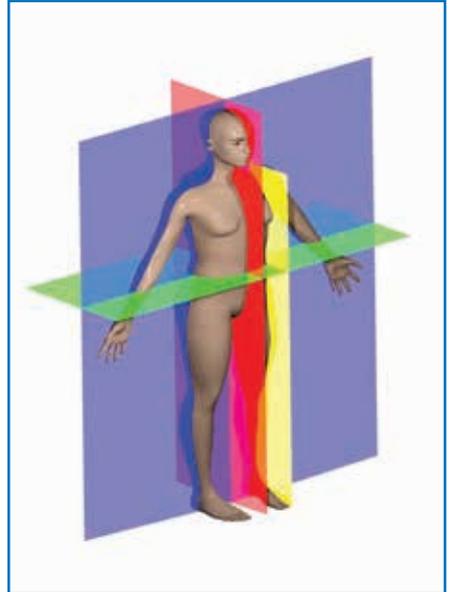
What is a CT scan?

A CT scan is an imaging investigation using X-rays. It is performed on a specialised scanner to produce detailed cross-sectional images of the body enabling diagnosis and follow up of disease and injury. A CT scan will typically take between 5 minutes and 30 minutes depending on the type of scan you are having.



How does a CT scanner work?

The CT scanner comprises of a doughnut shaped gantry and motorised bed. Contained within the gantry is an X-ray tube and row of detectors. As the bed slowly moves through the gantry the X-ray tube rapidly rotates and a narrow beam of X-rays passes through the body. As the X-rays leave the body, they are picked up by the detectors and information is sent to a computer. The computer converts the information into an image which can be viewed as either a separate slice or a number of slices combined together to form a 3D image.



Asking for your Consent

In order to obtain your consent, the radiographer performing your scan will need to ask you some questions and will explain what they are going to do. By giving your consent you are confirming that you understand what the procedure involves and that you are agreeing to have the scan.

What should I wear for the CT scan?

Please wear loose, comfortable clothing.

You may be asked to change into a hospital gown if there is any metal on your clothing.

Zips, clips, buttons, belts, underwire, adjustable straps, hooks and eyes will show up on the images and reduce the image quality.

You will also be asked to remove any jewellery, hair accessories, metal plated dentures, hearing aids, coins, phones and wallets if they are situated around the area of the body being scanned.

Should I stop taking my medication for the CT scan?

There is no need to stop taking your medication for a CT scan. Please continue to take your medication as advised by your doctor.

What happens during the CT scan?

The radiographer will position you on the bed and the area of your body being scanned will be placed into the scanner. Straps and pillows are occasionally used to support you during the scan.

It is important that you keep your whole body very still during the scan to prevent blurring of the images.

Once positioned, the radiographer will leave the room. They will be able to see you through the glass window and you can speak to them through the intercom system.

Depending on the type of scan you are having, you may be given breathing instructions.

Please listen out for these instructions and follow when asked. If you would like the instructions in a different language, please inform the radiographer.

Do I need to have an injection during my scan?

For certain types of CT scans, you may require an injection of contrast dye. This is an iodine based dye which enhances your blood vessels and organs.

If you do need to have a contrast injection as part of your scan, you will need to have had a blood test to check your renal function within the last 3 months prior to your appointment. A member of the bookings team will advise you of this when making your appointment.

When you arrive in the scanning department the radiographer will ask you some questions regarding allergies and any other medical conditions. They will also check if you have had the contrast previously. If you consent to having the contrast, the radiographer will insert a small plastic cannula into a vein in your arm or the back of your hand using a small needle.

Once the cannula is in position the needle is removed.

When you are given the injection of contrast you may experience some normal side effects which pass very quickly. These include a hot feeling throughout your body, a metallic taste in the back of your throat and you may feel like you have passed water. You won't have, it is just a strange sensation.

Once you have had the injection, your kidneys will begin to filter the contrast from your body. You will pass the contrast in your urine and it will be of normal colour. We advise that you drink more fluids to keep yourself hydrated over the next 48 hours after your scan.

What happens after my CT scan?

When the scan has been completed the radiographers will check the images to ensure that they are of a good diagnostic quality.

The radiographer will then take you off the bed and you are free to leave the department if you do not have any other examinations with us. If you have had an injection of contrast you will be asked to sit in the department for 15 minutes before the cannula is removed.

This is to ensure that you are feeling well enough to leave after your scan.

Pregnancy

A CT scan can be harmful to an unborn baby. If you are, or think you may be pregnant you must inform the radiographer. The radiographer will also check your pregnancy status prior to the scan.

What are the risks of having a CT scan?

A CT scan uses X-rays. This is a type of radiation known as ionising radiation. The level of radiation you get from a medical X-ray examination is very low and the associated risks are minimal. The radiographers are trained to ensure that the level of radiation you receive is as low as practicable and the benefits of having the scan are thought to outweigh any risks.

If you are having an injection of contrast there is a small risk that you could have an allergic reaction to it. If you begin to feel nauseous, short of breath or itchy please inform the radiographer immediately.

Occasionally when having the contrast, there is a small risk of extravasation where contrast leaks under the skin. If you feel any pain or tightness in the area the injection is being administered then please notify the radiographer immediately. The radiographer or radiologist will then give you further advice on how to treat this.

If you think you are pregnant, have any allergies or have had an allergy to contrast in the past, then you must inform your doctor. Alternatively, if you have any questions or would like to discuss any issues further please do not hesitate to call the Scanning Department on telephone: **020 8909 5801** Monday to Friday between the hours of 09:00 and 17:00.

What alternatives are available?

Your referring doctor has decided that a CT scan is the most suitable examination for you.

There are other types of scans available such as MRI or Ultrasound however they may not be suitable on this particular occasion. If you do not wish to have a CT scan please discuss your options with your doctor.

On the day of your appointment

Please aim to arrive in the Scanning department 15 minutes before your CT appointment. While we endeavor to keep to your appointment time, we do occasionally have emergencies where a patient requires an urgent scan at short notice. If your appointment is delayed for any reason we will inform you of this and we would be very grateful for your patience and understanding.

Relatives and escorts

You may bring a relative or friend with you to the scanning department, however they will not be permitted to enter the examination room during your scan.

Children

If you need to bring your children to the Scanning department with you, please ensure there is another adult to accompany them whilst you have your scan. Unfortunately, staff members are not permitted to look after your children during your scan.

How do I get my results?

Your CT scan will be reported by a Radiologist and the report will be sent to your referring doctor. This can take up to 2 weeks. The radiographer who has carried out your examination cannot give you any results on the day of your scan.

Where is the CT scanner located?

The CT scanner is located within the RNOH Scanning department. This is situated at the top of the slope in the main hospital on the Stanmore site.

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.

Telephone: **020 8909 5439 (PALS)**

Email: **rnoh.pals@nhs.net**

Telephone: **020 8909 5717 / 5439 / 5741 (complaints)**

Email: **rnoh.complaints@nhs.net**

NHS 111

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**

If you would like this leaflet translated into another language/large print, please contact the Quality Team on 020 8909 5439.

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