

# CT Scans

**Information for patients**



**Radiology Department**

**This leaflet contains important information about your scan.**

Please read ALL sections of the leaflet carefully and follow the important instructions.

## **Patient Information Leaflet: CT scans**

This leaflet explains what happens during a computerised tomography (CT) scan. It tells you what is involved and about the risks and benefits of having the scan.

**For people with childbearing capability between the ages of 12-55 years it is important to ensure that you are not pregnant.** If there is any possibility that you might be pregnant, please let us know immediately.

If you weigh more than 203 kg (32 stone), please contact us using the telephone number at the top of your appointment letter as soon as possible. We are only able to scan patients above 203 kg at one site and your appointment may need to be re-arranged.

## What is a CT scan?

This is a type of scan which uses X-rays linked to a sophisticated computer to create detailed pictures of your body in 'slice sections' (cross sections).

The CT scanner is an open ring-like structure, which looks a bit like a giant doughnut, rather than a tunnel as everybody expects!

The pictures will be examined by a Radiologist (a doctor trained in checking X-rays), to see what might be the cause of your symptoms.

A more detailed explanation of the scanning procedure is given on the following pages.

## Can I take my prescribed medicines as usual?

Yes, you can continue to take all your regular medicines as prescribed, unless you have been told otherwise.

### **Caution**

**Keep all tablets and medicines out of reach of children.  
Never give any medicines prescribed for you to anyone else.**

## What clothing should I wear?

You may wish to wear loose clothing that can be removed easily. You may be asked to change into a hospital gown, depending upon which area of your body is being scanned.

If you wear clothing which does not have any metal (zips or buttons, bra wires or fasteners, or decoration), it may be possible to carry out the scan without you having to change your clothes.

## **Can I bring a relative or friend?**

Yes, but they will not be able to go with you into the scan room, except in special circumstances. There is limited seating in the CT waiting areas of all our sites, so during busy periods your accompanying visitor may be asked to return later. We will telephone them to let them know when you are ready to be collected. Please be aware that we cannot guarantee that we can care for young children whilst you are having your scan.

### **Interpreter**

If you require an interpreter for your scan, please contact the appointments team on the telephone number on your appointment letter and this will be arranged for you.

Please be aware that it is Trust policy that family and friends cannot act as an interpreter for your scan.

## **Are there any risks?**

### **Exposure to radiation**

During a CT scan you will be exposed to X-ray radiation. We are all exposed to background radiation from the ground, building materials and the air, every day of our lives. This is normal and natural. Medical X-rays give an additional dose and the amount of radiation you're exposed to during a CT scan varies, depending upon how much of your body is scanned.

Generally, the amount of radiation you're exposed to during each scan will range from the equivalent of a few months to a few years of exposure to natural radiation from the environment. It is thought exposure to radiation during CT scans could slightly increase your chances of developing cancer many years later, although this risk is thought to be very small (less than 1 in 1,000).

The benefits and risks of having a CT scan will always be weighed up by your doctor and the specialists in Radiology before your CT scan, to ensure that this is the best procedure for you to have to diagnose (or treat) your condition. The Radiographers always ensure that the radiation dose is kept as low as possible and CT scanners are designed to make sure you're not exposed to unnecessarily high levels.

**For more information, read GOV.UK patient dose information.**

Visit: **[www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance](http://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance)**

### **Contrast Injection**

The contrast injection contains iodine, which can cause an allergic reaction in a few people. You should tell the Radiographers who are carrying out the scan if you have had an allergic reaction to iodine or contrast dye in the past, or if you have any other allergies. Very rarely the dye may cause some kidney damage in people who already have kidney problems. We will ask you to complete a questionnaire on the day of the examination before the procedure takes place, to assess the risks of giving you the contrast dye. We may also take a small sample of your blood to test your kidney function.

There is a small chance that the contrast injection can leak outside the vein and cause temporary swelling and discomfort in the arm; this does not happen very often. In the unlikely event of this happening, we will provide you with further instructions and advice.

## **How do I prepare for the scan?**

You may eat and drink normally on the day of the scan up until 2 hours before the scan.

You will need to fast (have nothing to eat) for two hours before the appointment time, so that there is not too much bowel gas on the images. This also helps to prevent you from feeling sick if we give you a contrast injection during the scan.

In the 2 hours before your scan you may only drink water.

## **On the day of the examination**

Please check your appointment letter carefully for your appointment date, time and location.

When you arrive in the Radiology department you will be greeted by the reception staff and directed to the CT waiting area and given 2 forms to read and complete.

One of these forms relates to pregnancy status, Oxford University Hospitals is an inclusive organisation who recognises and accepts the diverse community that it is part of. This has resulted in the organisation reviewing many of its processes and procedures to make sure they are in line with this, with the safety and protection of individuals being at the centre of any changes or adjustments. We are now asking the childbearing capacity questions to all patients, regardless of their gender.

Your clinician has requested diagnostic imaging that requires an exposure to radiation. As radiographers, it is our professional duty and legal responsibility to ensure that we protect individuals from unnecessary exposures to radiation. This is particularly relevant when considering any potential exposure of an unborn baby to ionising radiation, as they are at greater risk from the harmful effects of radiation. If we cannot exclude that you are not pregnant, we may need to rebook your scan.

**If there is any possibility that you might be pregnant, please contact the Radiology department before your appointment.**

The Radiology staff will check your identity and prepare you for your scan.

The second form you will be asked to complete is a Contrast Safety Questionnaire about your medical history e.g. diabetes, heart problems, asthma, kidney problems so that we can assess any risks of giving you contrast dye.

If you are having a scan of your abdomen and pelvis, you may need to drink a special liquid called Gastrografin, 30 minutes to 1 hour before the scan. This highlights the bowel (gut) on the X-ray pictures. This may be in addition to an injection of contrast.

Other abdominal CT scans may require you to drink water whilst in the waiting area or immediately before the scan.

For the majority of scans, we will give an injection of contrast dye. This will help to show up your blood vessels and body organs on the scan pictures.

If you are having an injection of contrast dye, a cannula (small plastic tube) will be inserted into a vein in your arm. We use this to give you the injection of contrast dye during the procedure.

The cannula will either be put in when you are in the preparation area or later, when you go into the scan room.

Contrast dye contains iodine, which can affect your kidneys if you already have kidney problems. We may collect a small sample of blood from your cannula, to test your kidney function before we give you the contrast dye.

If we are imaging the lower bowel specifically, we may need to give you some contrast dye liquid into your rectum. This will be discussed with you prior to the start of scan and will be done in the CT scan room. It is a quick and painless part of the procedure.

## **How long does the scan take?**

The actual scan only takes a minute or two, but the preparation takes longer. You may be in the scan room for up to 15 minutes.

You should allow approximately an hour from the start of your appointment before you will be ready to go home.

The Radiology department also provides an emergency service to sick patients. If we need to see an emergency patient, your appointment may be slightly delayed. We will do our best to keep you informed of any delays that may occur.

## **What happens during the scan?**

After all preparation has been done (getting changed and having the cannula fitted, if needed) you will be taken to the CT room. You will meet the Radiographers, who will explain the CT scan to you and tell you what to expect. You can ask any questions you may have.

You will be asked to lie on your back or your front on the scan table, depending upon which area of your body we need to scan. The scanning table will move your body through the scanner, so that the areas we need to look at can be scanned. You may be asked to hold your breath while the scanner takes the pictures. If you have difficulty holding your breath, please tell us.

You will be told about what to expect if you are having the injection of X-ray contrast dye. This is usually a metallic taste in the mouth and a warm sensation throughout the body, particularly in the pelvis, which lasts for about 30 seconds. Please tell us if you experience any discomfort in your arm during the injection.

The scan itself should not be painful. The Radiographer who carries out the scan and the Radiology assistant can see and hear you at all times through a connecting window and an intercom.



## **What happens after the scan?**

You can leave soon after the scan and continue with your normal daily activities. If you had X-ray contrast dye as part of the scan, you will be asked to remain in the department for up to 20 minutes, because some people may develop a delayed allergic reaction to the dye. If this does occur, we will treat you in the Radiology department.

### **You can eat and drink as you would normally.**

If you have an injection of contrast you may be advised to slightly increase your fluid intake for the rest of the day. This helps to dilute the contrast and minimise potential damage to your kidneys.

If you are diabetic and taking metformin, we will speak to you about whether you need to stop taking this medication for 48 hours after the scan and visiting your GP for a blood test.

If you had the injection of contrast dye, you can remove the gauze dressing from your arm after one hour.

## **When and how will I know the result of the CT scan?**

You will not receive the results straight away. The images will be looked at and a report written by the radiologist.

The written report will be sent to the doctor that referred you to us; this is not necessarily your GP. If you are unsure who referred you for the scan, please ask the Radiographers whilst you are in the scan room.

If you do not have another outpatient appointment and do not hear anything about the results within three weeks, please telephone the referring doctors or their secretary for advice. If you do not have their number, please telephone the hospital switchboard and ask to be put through to them:

Tel: **0300 304 7777**

## **Questions or concerns**

If you have any queries or are unable to come for your appointment, please telephone us using the following telephone number (Monday to Friday 8.30 -16.30):

Tel: **01295 229185**

## **Further information**

Further information about CT scans is available on the following websites:

### **The Society of Radiographers**

There are short videos showing the way in which X-rays and scans are used, including CT scanning.

Visit: [www.sor.org](http://www.sor.org) and search for 'patient information'

### **Impact scan**

Visit: [www.sor.org](http://www.sor.org) and search for 'impact scan CT patient guide'

### **NHS Choices**

Visit: [www.nhs.uk/conditions/ct-scan/](http://www.nhs.uk/conditions/ct-scan/)

### **For further information about the Oxford University Hospitals NHS Foundation Trust:**

Visit: [www.ouh.nhs.uk](http://www.ouh.nhs.uk)

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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