

What is a CT scan?

CT stands for Computerised Tomography and is a special type of x-ray that can look at various parts of the body. The information from the x-rays is recorded in a series of cross sectional images that can be built up into a three dimensional image of the area being examined.

Who performs the scan?

The person who carries out the scan is called a radiographer (a health professional trained to perform imaging procedures). They will explain the procedure to you and show you how to position yourself on the scanner table.

Do I need any special preparation before the examination?

You can eat and drink normally, unless specifically told otherwise in the appointment letter. However, we do not advise you to eat a large meal before your scan. Please read your appointment letter carefully.

Continue to take any medication prescribed by your doctor.

If possible, try to wear clothing without metal zip fastenings or clips. If this is not possible a hospital gown and changing facilities are provided. Try to leave personal valuables at home.

I am a diabetic. Does this change anything?

The preparation for your procedure is the same. However, if you take metformin (Glucophage, Avandamet) please read the information below. You can take all other diabetic medications as normal.

If you have any concerns or queries regarding your diabetes, please ring the appropriate appointments help-line telephone number at the hospital you are attending, and speak to a member of staff who will be able to advise you.

Alternatively, please contact your GP or Diabetic Nurse, who may also be able to offer advice.

I take metformin (Glucophage, Avandamet) tablets. Does this change anything?

Yes. Metformin (Glucophage, Avandamet) is most commonly taken by diabetic patients to control blood sugar, but occasionally is taken for other conditions.

If you have problems with your kidney function, we may ask you to stop taking metformin for 48 hours after the scan. The staff will advise you about this when you attend for your examination.

If I have problems with my kidney function, does this change anything?

Yes. Depending on the scan you are having and how severe your kidney problems are, the preparation for your procedure may change. Please ring the radiology department at the hospital you are attending, and speak to a member of staff who will be able to advise you.

What if I am pregnant?

CT scanning of pregnant women should be avoided whenever possible. If you think you may be pregnant it is very important that you tell the radiographer before your scan. To avoid

accidental irradiation, all females between the ages of 11 and 55 years are asked the date of their last menstrual period (LMP). From this information x-ray staff will decide if there is cause for the CT examination to be postponed, or if it is safe to continue.

What does the examination involve?

The examination differs depending upon which area of your body is being examined.

For MSK CT scans:

- You will lie on the scan table
- You will be moved into the scanner and when you are ready your scan will begin.
- If information is needed about the blood vessels, an injection of a colourless x-ray dye will be given into a vein in your arm during the scan to help us with the interpretation of the scan pictures.
- All that is expected of you while your scan is being performed is that you keep as still as possible.
- The scan table and sometimes the scanner gantry (the large doughnut shape) will move during the scan.
- The scanner makes a noise similar to your washing machine.
- The radiographer can talk to you through an intercom and you can also talk to them.
- An injection of a colourless x-ray dye is often given into a vein in your arm. This helps to show up blood vessels and organs in the body, and makes the scan easier to interpret. The radiographer will have completed a check list with you and asked you if you have any allergies or previous reactions to the x-ray dye. If you have previously reacted to the x-ray dye, please ensure that you have informed the radiographer prior to your scan.

How long will my scan take?

Scan time can be anything between five to 30 minutes.

How does it feel?

You should not experience anything to cause any discomfort. However, if you are given an injection of x-ray dye you may get a warm sensation all over your body and a sensation like you are passing water. If you get these sensations, they will pass within 30 seconds. The radiographer will explain this to you when you attend for your appointment.

What happens after the scan? When will I get my results?

After your scan has finished, we will not be able to tell you the results as the reporting radiologist will need to study the images carefully. A report will be sent to the consultant or GP who requested the procedure. They should contact you when the results are available, or have arranged a follow up appointment to see you.

Can I drive home?

Yes.

What are the benefits of having a CT scan?

This examination will help us make the correct diagnosis so you will be able to be given the correct treatment.

What are the risks of having a CT scan?

Like all x-ray machines, a CT scanner produces potentially harmful x-rays. Modern equipment is designed to keep the dose to patients as low as possible. If your doctor has asked for a scan, then they will have decided that the benefit of having the information that the scan gives, is greater than the risk of the small dose of radiation.

Since x-rays can harm unborn babies, if you are, or could be pregnant, please tell the radiographer before you have the scan. This is very important.

In order to obtain the best possible images, x-ray dye is usually injected under pressure, using a special injector machine. This is to show the blood vessels, organs and bowel more clearly and to obtain the best quality images. X-ray dyes are safe drugs. While the risks are considered very low, the potential side-effects of x-ray dye, regardless of age, include allergic sensitivity and kidney damage. A haematoma (bruising) can rarely occur at the injection site. There is also a small risk that the x-ray dye can leak out of vein into the surrounding tissues during the injection. This is called extravasation. Although extravasation can cause some temporary discomfort, long term side effects are rare. If an extravasation occurs you will be given advice whilst in the department, and your arm will be examined by a doctor before you leave.

Can I still breast feed my baby if I have a CT scan with an injection of x-ray dye?

According to the Royal College of Radiologists, it is not necessary to stop breastfeeding after an injection of X-ray dye. Although the dye enters your bloodstream directly, only a small proportion (less than 1%) is excreted into the breastmilk, which is safe for infants.

While the risks are considered very low, the potential side-effects of X-ray dye, regardless of age, include allergic sensitivity and kidney damage.

If you wish to take a break from breastfeeding, you should store enough milk prior to the scan to feed your child for 24 hours. After the scan, you should express and discard your milk for 24 hours. After this time, you can continue feeding your child as normal. If you do not express milk prior to the scan, your child will need to be fed with formula milk for 24 hours. It is important to speak with your midwife or physician before making any decisions about stopping breastfeeding.