
Having a CT Scan



Patient Information





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Introduction

You have been referred by your consultant to have a Computed Tomography (CT) scan.

What is a CT scan?

A CT scan uses ionising radiation to provide detailed cross-sectional images of the body to help the doctors make a diagnosis, assess the response to treatment or for surveillance after finishing treatment.

For some CT scans you may need to have an injection of intravenous (IV) iodinated contrast media (x-ray dye) to enhance the images we take during scan. The IV contrast shows up white on the scans, helping the radiologist to tell the difference between blood vessels and other structures.


Is there any preparation?

Please do not eat for **two hours** before your appointment time. Ensure that you drink 500mls (about four cups) of fluid prior to your arrival in the CT department. We will also ask you to drink some more fluid when you arrive. You can drink tea, coffee, water and any still drinks, but please **do not** drink fizzy drinks or alcohol. This is to ensure that you are well hydrated prior to the injection of IV contrast during the scan.

It is important that you tell us if:

- You have had a CT scan within four weeks of this appointment
- There is any possibility you may be pregnant
- You have had unprotected sex since your last menstrual period
- You have mobility problems
- You are allergic to IV CT contrast.

Please contact your consultant's secretary three working days before your scan if you need hospital transport arranged.



Metal can interfere with the clarity of the images we take. Try to wear clothes that have no metal in them such as t-shirt and leggings or tracksuit bottoms and please avoid wearing wired bras. However if you are wearing clothing containing metal we can provide you with a gown to change into.

If we need to give you IV contrast, we will ask you to fill in a patient questionnaire about allergies and any medicines you are taking. This is to assess your suitability to have the contrast, to minimise interactions with other medicines, and to give consent for the injection. We may need to do a blood test before we can give you the IV contrast. Please discuss any concerns with the radiographer before your scan.

What happens during the CT scan?

If you require the IV contrast, a small plastic tube (cannula) will be inserted into a vein – usually in the back of your hand, or in the crease of your elbow. This cannula will be used to give you the injection of the dye during the scan.

The scanner looks like a large doughnut, and you will lie on the CT table which will move slowly through the scanner to allow pictures to be taken. The machine makes a noise whilst working and for some scans you will be given breathing instructions. When we are giving you the injection of IV contrast, a radiographer will be present to check the contrast is going into the vein. You may experience a sensation of warmth and a metallic taste in the mouth during the injection.

We will make every effort to scan you on time, but please be aware that there may be delays when we have to accommodate urgent cases. The CT scan itself takes about 15 minutes but you should allow two hours for your appointment.

Please note you will be called into the scanning room according to your appointment time and not your arrival time.



CT Scanner


What are the risks?

Radiation

We will expose you to ionising radiation when we carry out this examination. We are all exposed to ionising radiation from naturally occurring sources such as cosmic rays, certain types of soil and rocks, and even food we eat. Ionising radiation can cause cell damage that in turn, after many years, may turn cancerous. The radiation associated with your exam will therefore carry a small risk which is less than 0.1%. This risk will be far outweighed by the benefits of having this exposure. We will also tailor the amount of radiation we use to you.

Allergic reaction

The injection you have for CT scans is generally very safe. Many people have this injection in CT departments every day. However, with every injection of the contrast media, there is a slight risk of a reaction.



The contrast media that is used contains iodine which some people are allergic to. We will check whether you have had any allergies in the past before your scan. Some people may develop a rash and a few people may experience a mild asthma attack. Rarely, the dye may result in a more serious allergic reaction, which may need to be treated with medicines. The radiographers are trained to recognise these reactions and to treat them. Should it be necessary, other staff are at close hand to assist.

Infiltration

During injection there is a very low risk of contrast leaking outside the vein, into the surrounding tissue. The radiographers are trained to recognise the signs and to treat them.

Checking kidney function

The contrast media can affect the kidneys; this is uncommon (affecting less than 1 in 100 people) To reduce the chances of this occurring, we will need to check that your kidneys are functioning properly before the scan. This is done with a blood test, arranged by the CT department. This may not be necessary if you have had a recent blood test and the results are available to check.

What happens after the CT scan?

If you were given an injection of IV contrast, you will be asked to stay in the area where you were given the contrast injection for 30 minutes and within hospital / clinic premises for one hour after the injection.

Please drink 500mls of extra fluids to rehydrate your body.

If your child is having a CT scan, please encourage them to drink fluids.

The scans will be carefully analysed and interpreted by a radiologist, who will prepare a report and send it to your doctor. Your doctor will discuss the results with you at your next outpatient appointment.

Contact details

If you have any questions after reading this booklet, please call the CT department for advice.

**Radiology Reception,
Cavendish Square** 020 7811 8941

**CT Reception, Chelsea
(Reuben Imaging Centre)** 020 7808 2575

CT Reception, Sutton 020 8661 3222

If you have any queries or feel unwell after the scan, please call for advice.

The Royal Marsden Macmillan Hotline: 020 8915 6899

You can ring the hotline 24 hours a day, 7 days a week.

Call us straight away if you are feeling unwell or are worried about the side effects of cancer treatments.

This service provides specialist advice and support to all Royal Marsden patients, as well as to their carers, and both hospital and community-based doctors and nurses caring for Royal Marsden patients.

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This booklet is evidence based wherever the appropriate evidence is available, and represents an accumulation of expert opinion and professional interpretation.

Details of the references used in writing this booklet are available on request from:

The Royal Marsden Help Centre

Telephone: Chelsea 020 7811 8438 / 020 7808 2083

Sutton 020 8661 3759 / 3951

Email: patientcentre@rmh.nhs.uk

The Royal Marsden NHS Foundation Trust
Fulham Road
London SW3 6JJ

royalmarsden.nhs.uk

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Should you require information in an alternative format, please contact The Royal Marsden Help Centre.

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The Royal Marsden publishes a number of booklets and leaflets about cancer care. Here is a list of information available to you.



Diagnosis

- A beginner's guide to the BRCA1 and BRCA2 genes
- CT scan
- MRI scan
- What is an ultrasound scan?
- A beginner's guide to Lynch syndrome



Treatment

- Central venous access devices
- Chemotherapy
- Clinical trials
- Radiotherapy
- Radionuclide therapy
- Your operation and anaesthetic



Supportive care

- Eating well when you have cancer
- Reducing the risk of healthcare associated infection
- Support at home
- Your guide to support, practical help and therapies



Your hospital experience

- Help Centre
- How to raise a concern or make a complaint
- Your health information, your confidentiality



Please visit www.royalmarsden.nhs.uk/patientinfo where many patient information booklets are available to download.



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