

# **Diagnostic Imaging – In-Patients**

# **COMPUTED TOMOGRAPHY – CT SCAN**

# Introduction

Your CT scan will be carried out in the Diagnostic Imaging (X-Ray) Department. Please read this leaflet carefully. It explains what will happen and why, and we hope it will answer some of the questions you may have.

# What is a CT scan?

A CT scan is a type of X-Ray. CT stands for Computed Tomography and simply refers to the technology in the equipment.

You lie on a narrow table which passes through a circular hole in the middle of the machine. A fan-shaped beam of x-rays passes through a slice of your body onto a bank of detectors. The x-ray source and detectors rotate around inside the machine. An image of the slice is formed by a computer and displayed on a TV monitor. You are moved slowly through the hole to take a picture of different slices of your body.

Although all CT scans involve the use of Ionising Radiation, every effort is made to keep doses as low as reasonably possible. Your doctor should have explained the benefit of the scan weighed up against the radiation risks. However, should you have any questions or concerns, please speak to the doctors or nurses involved with your care.

#### You must inform the staff if you are, or think you may, be pregnant.

#### Will I need to have an injection?

You may need an injection as part of your scan. CT is used to look at areas where no natural contrast exists. In that case, the radiographer will give you an injection of dye called a contrast medium, usually containing iodine. This has the effect of creating artificial contrast which clearly shows up the area your doctor wants to investigate for damage or disease. Sometimes several scans are taken before the contrast medium is injected, and then further scans are taken after the injection. The contrast may give you a hot sensation as it goes round your body but this passes very quickly.

Occasionally you will also be asked to drink up to one litre of water or squash which helps to distend your bowel, protect your kidneys and improve the images. You will be able to use the toilet whenever necessary. This fluid needs to be drunk up to one hour before your scan. Please do this in advance of your appointment.

## Will it be painful?

You will feel nothing from the scan itself. If the scan requires the use of contrast medium the radiographer will explain to you what is involved.

#### Who does the scan?

The person who carries out the scan is called a radiographer and will be assisted by a radiology assistant. They will explain the process to you and show you how to position yourself. It is very important that you stay still for the whole time whilst the pictures are being taken. You may also be asked to hold your breath for some of the time. The radiographer or assistant will make sure you are comfortable afterwards and ready to return to the ward.

Please do not ask the radiographer for information about your scan. Your scan will be examined by a Radiologist, who will interpret the pictures (there may be more than 1000 images) and send a report to the ward.



## About this leaflet:

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If you have feedback regarding the accuracy of the information contained in this leaflet, or if you would like a list of references used to develop this leaflet, please email pals@dchft.nhs.uk



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