



What is a CT (Computed Tomography) scan?

A CT (computerised tomography) scan is a non-invasive medical test used to diagnose and monitor medical conditions. It is a fast and highly effective tool which provides detailed, cross-sectional views of areas of the body that may be hard to reach.

How does a CT scan work?

The CT scan uses specialised X-ray equipment and a computer to create images of the inside of your body. Whereas a standard x-ray only sends out one beam to capture the image, in a CT scan - several beams of x-ray are sent out at different angles. This creates a much more detailed picture in two or three dimensions. Bones, internal organs, soft tissue and the brain can all be viewed in detail through the CT scan, to help diagnose inflammation, disease and cancer and monitor many other health conditions.

CT scans can be used to look at:

- Internal organs
CT scans are often used to examine the chest and abdomen. They can provide clear images of different types of tissue, such as the liver, intestine and kidneys; helping to identify a range of conditions including pneumonia and kidney tears.
- Soft tissue
CT scans are used to identify abnormal tissue in areas such as the pancreas, liver and blood vessels. This can help to diagnose different types of cancer.
- Brain
CT scans of the head can check for bleeding, blood clots and suspected tumours in the brain.
- Blood and bone density
CT scans are able to take pictures of bones and the surrounding muscles and blood vessels. This is useful when looking at the condition of blood vessels and bone disease, such as osteoporosis.

What does a CT scan involve?

The CT scan is a painless procedure which takes place in a large, doughnut-shaped machine.



In order for the images to be taken you will be asked to lie on a table that can slide in out of the scanning machine. The radiographer will adjust this slowly to position the part of your body that needs to be scanned in the centre of the scanner. It is important to relax and lie still so that the CT scan can take accurate images. The whole scanning process will take between 15 minutes and one hour, depending on the different angles and number of pictures needed.

For some scans, you may have an injection of a dye (contrast medium) or be asked to drink a liquid that will help to improve the quality of the scan. These dyes are removed from the blood by the kidney and passed out through the urine harmlessly.

What Happens after my scan?

The CT scan report is created following the scan and a report is written, typed and checked for accuracy by the reporting professional. The report is then authorised for release to the requesting doctor.

Once your report has been received, your doctor may contact you to discuss this further either by phone or by seeing you back in the outpatient clinic. Occasionally the doctor may write to you and your General Practitioner with the results of the scan and possibly further advice or a recommendation for further assessment or treatment.