

Services

The radiology department at QVH, with generous help from the League of Friends, commissioned and installed a brand new CT scanner in December 2018.

The service currently runs from Monday to Friday, between 9am and 5pm.



How does computed tomography work?

CT uses X-rays, which pass through your body and are captured by detectors. The strength of the signals received by the detectors varies, according to the type of tissue the X-rays have passed through. For example, bone will weaken the X-ray more than the softer tissues in the body, and give a lower signal. The signals are processed by computers, and formed into digital images.

The CT scanner looks like a giant doughnut. Inside the machine there is an X-ray tube which produces

the X-rays. This is fixed onto a ring, with rows of detectors on the opposite side of the ring. The whole ring rotates very fast during the scan, making a swishing noise that sounds a bit like a washing machine.

The table top moves through the hole in the centre of the machine, and through the beam of X-rays. The detectors on the rotating ring collect X-ray signals from every angle, gathering a huge volume of data. The resulting images show 'slices' of the body, and can also be reconstructed in 3D.

Most CT scans are very quick, taking only a few minutes from start to finish.

Are CT scans suitable for all patients?

Everyone can have CT scans, there are no exclusions and the machine does not use magnets.

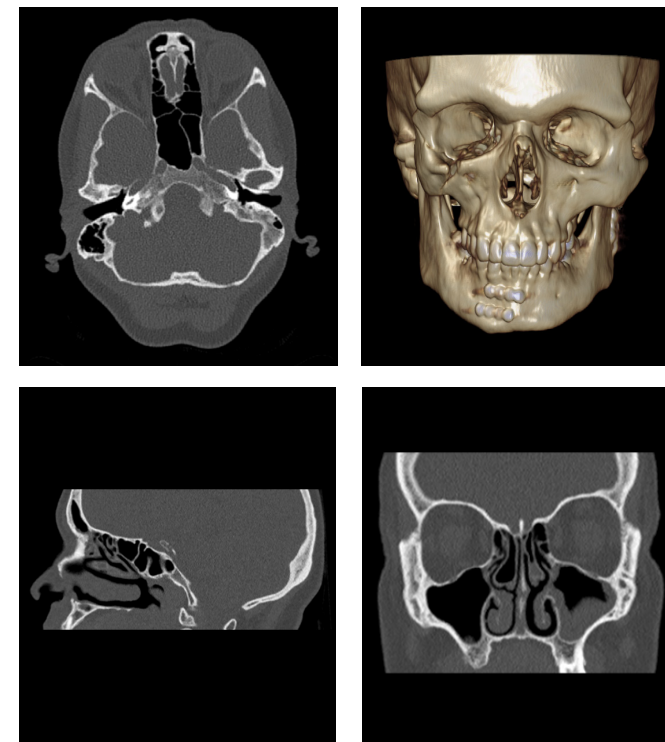
Because the scan uses X-rays, CT is not recommended during pregnancy unless the circumstances are exceptional. If you are, or think you may be pregnant, it is important that you telephone us prior to your appointment.

Is CT safe?

As with all forms of radiation, X-rays have the potential to cause damage to cells in the body. The risks associated with the use of radiation are carefully considered by clinicians, throughout the referral process. This ensures that the exposure to radiation is justified, by making sure that the benefits you may gain from having the CT scan outweigh the risks. The CT scanner at QVH uses dose reduction software.

Radiographers are trained to practice safely, and to keep the amount of radiation used as low as possible. Further information on the use of X-rays in diagnostic imaging can be found via:

<https://www.gov.uk/government/publications/medical-radiation-patient-doses/patient-dose-information-guidance>



CT scans with contrast

For some scans, you will need to have an injection of contrast ('X-ray dye'), to highlight your organs and blood vessels. The 'dye' is clear and colourless, but shows up brightly on the scan. We will put a small cannula into one of your veins, so we can give you the injection.

CT (Computed Tomography) Scan

Radiology Services at Queen Victoria Hospital (QVH)

Are other tests available?

Because CT uses X-rays, the need for you to have the scan is always considered carefully. If you have been referred for a CT scan, it is because CT is thought to be the best imaging test to investigate your symptoms.

If you have concerns, or would like to explore whether there are other diagnostic tests available to you, this can be discussed with the doctor who is referring you for your CT scan.

Contact details

Should you have any further questions or queries, please do not hesitate to contact us.

Radiology Department
Tel: 01342 414249

Please ask if you would like this leaflet in larger print or a different format.

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The dye is not radioactive, and does not get absorbed by the body. It is filtered from your blood by your kidneys, and passed out of the body in your urine. We recommend drinking extra fluids following your scan, to help flush the dye through your kidneys.

You may need to have a blood test before your scan, to make sure your kidneys are functioning well. This is usually arranged by your doctor at the time you are referred for your scan.

When we inject the dye, you may experience a hot flushing sensation, and may get a metallic taste in your mouth. You may also get a hot sensation in your bladder, which can feel as though you have wet yourself. These sensations are normal and wear off quickly, there is nothing to worry about and you will not wet yourself.

Some people (around 1 in 1000) may experience a minor allergic reaction to contrast. In very rare cases the reaction can be more severe. However the vast majority of people do not react to the dye at all and experience only the warm sensations. We ask a series of safety questions to try to ensure patients are suitable for the contrast injection to minimise any risk.

Breastfeeding

The Royal College of Radiologists advise that it is safe to breastfeed following the injection of contrast dye. They also advise that an extremely small amount of the contrast may enter breast milk. However, there is no need to cease breastfeeding as the dye is not absorbed by the body. The infant is therefore unlikely to ingest any of the dye from their gut.