



Cardiac CT Scan

This factsheet will explain how a Cardiac CT Scan is performed at Western Isles Hospital, and will answer some of the most commonly asked questions. It is not meant to replace informed discussion between you and your doctor, but it can act as a starting point for such discussion.

What is a CT scan?

CT (computed tomography) is a method of getting high quality X-ray pictures of the human body. These are then processed by a powerful computer.

The CT scanner is used to take pictures of slices of your body and can show both bone and soft tissue. This helps to diagnose any health problems at an early stage. Your doctor can then decide on the best treatment for you.

What are the risks?

- The amount of X-ray radiation is minor and will not harm you. The amount of radiation used during the CT Cardiac scan varies but is around 2 to 3 times the amount that you would normally receive in a year from background natural sources of radiation such as cosmic rays and rocks in the Earth's crust.
- We can assure that all safeguards to minimise radiation are taken.
- Very occasionally people experience an allergic reaction to the contrast injection. This usually manifests as an itchy rash that settles down by itself. Occasionally people require additional medications for this.
- Rarely the contrast (dye) goes into the tissues under the skin of your arm rather than the vein. This can cause bruising and swelling which may require ice packs. The contrast is washed out through your kidneys and occasionally (in less than 2%) it can cause some temporary impairment of your kidney.
- You should make sure you drink plenty of water after your scan. When we use medication to slow your heart rate down, this can make some people feel lightheaded or dizzy. If this happens, we will get you to drink some water and lie down. You should not drive or cycle until you feel back to normal.
- The risk from radiation exposure is higher for unborn children; therefore, women of childbearing age (12-55) will be asked about their menstrual history and pregnancy status. **If there is a chance that you may be pregnant, please phone our Radiology receptionist before your appointment date on 01851 708224.**

How do I prepare for my scan?

To obtain good quality pictures of the blood vessels it is important that your heart rate is not too fast.

Prior to attending for the appointment there are several things you can do to assist in achieving the best heart rate for your scan.

Do not take any stimulants for 24 hours before your scan;

- Nicotine (smoking, patches or gum)
- Caffeine (coffee, tea, green tea, soft drinks such as cola)
- Energy drinks (e.g. Red Bull, Monster etc.)
- Chocolate
- Alcohol

You should also **avoid**:

- vigorous exercise for 24 hours before the scan
- solid foods for 4 hours before the scan.

It is also important that you are well hydrated for the scan, so drink plenty of water the day before and the day of the scan.

Medication

The clinician organising the scan may prescribe some medication for you to take for a few days before the scan and on the morning of the scan. **It is essential that these medications are taken as prescribed.** They are designed to allow your heart rate to slow down on the day of the test, ensuring better pictures.

If you normally take medication called **Metformin** (Glucophage), you **should not** take it for the 2 days after the scan.

If you take **Viagra** (Sildenafil) or other similar medication (e.g. Tadalafil/Cialis or Vardenafil/Levitra), you should avoid taking these for 72 hours before the scan.

Please Note. You should take your other prescribed medications as normal, unless instructed not to by the clinician.

When you arrive at the hospital

1. You should report to the Ambulatory Care Unit at Western Isles Hospital at your appointment time. (The Ambulatory Care Unit will be clearly signposted and is located to the far right of the main hospital entrance).
2. Ambulatory Care Unit staff will complete some preliminary questions and a brief examination. They will also place a cannula in your arm to allow an x-ray dye to be injected at the time of the scan (this lets us see the blood vessels more clearly).
3. Your heart rate will be monitored during the scan using three sticky electrode patches on your chest. A small amount of chest hair may need to be shaved to place these.
4. You will then be taken to the scan room to allow the scan procedure to be undertaken. You will be asked to lie down on the couch of the CT scanner. The ECG leads will be attached to the chest stickers and the contrast injection attached to the venflon. Once you are in the correct position, it is important that you stay as still as possible.
5. If your pulse rate is too fast you may be given a dose of medication into the vein to allow it to slow down further. You will also receive a tablet under the tongue to allow the coronary arteries to dilate so that better pictures can be taken.
6. You will be given instructions to “breathe in and hold your breath.” This will happen several times while we set up the scan and you will be told when you can breathe normally. We will give you some contrast (dye) so that we can see the blood vessels around your heart clearly. This can give a metallic taste in your mouth and a warm sensation. This is normal.

Occasionally we will be unable to proceed with the scan (for example if your heart rate remains too fast despite the medication you are given). If this is the case, we will inform you and your clinician and an alternative appointment or a different test will be arranged.

After your scan

The images will be checked to make sure we have all the information we need. You will need to be monitored after the injection of contrast media and heart rate controlling medications back in the Ambulatory Care Unit to be sure the medications have worn off and you are safe to travel home.

You should expect to be in the hospital for 2 hours, although this timescale cannot be guaranteed.

We store your scans for future reference..

The results

The scan will be reported by a Radiologist, and your results will be sent to your doctor or to the health care professional who asked for the CT scan. You may be sent a follow-up appointment to discuss your results with them.

Please do not contact the Radiology Department for the results.

Our service to you

We want to make your visit to the Western Isles Hospital as pleasant as possible. If you have any questions not covered by this guide, please telephone our receptionist on tel: 01851 708224. We will always make every effort to provide the best service for you.



We are listening – how did we do?

We welcome your feedback, as it helps us evaluate the services we provide. If you would like to tell us about your experience:

- speak to a member of staff
- visit our website www.wihb.scot.nhs.uk or share your story at:
- www.careopinion.org.uk or tel. 0800 122 31 35
- tel. 01851 704704 (ext 2236) Monday-Friday between 10am-4pm.