



**Queensland
Government**

PATIENT INFORMATION SHEET ONLY

NO DOCUMENTED CONSENT REQUIRED

Unless patient is renal impaired

1. What is a CT Cardiac Scan?

Computer Tomography (CT) or 'CAT' scans are special x-ray scans that produce cross-sectional, highly detailed pictures of the body using x-rays and a computer.

A Cardiac CT examines the heart, its arteries and how the heart itself works.

The CT machine looks like a large doughnut with a narrow table in the middle. The table moves through the large circular hole in the centre of scanner.

A Cardiac CT requires the injection of iodinated 'Contrast'. Contrast allows your organs and blood vessels to be seen more clearly.

For more information on Contrast and the risks involved in its use, please read the **Iodinated Contrast Patient Information Sheet** (if you do not have this information sheet please ask for one).



2. Will there be any discomfort, is any anaesthetic needed?

A CT Cardiac Scan is a painless procedure, no anaesthetic is required.

The CT machine is open at both ends so patients who are claustrophobic have little difficulty with this test.

3. Preparation for the procedure

The medical imaging department will give you instructions on how to prepare for your scan.

- You may be told *not* to eat/drink any foods containing caffeine (tea/coffee, cola drinks, chocolate etc) in the hours leading up to your appointment.
- If you take the following medications *Viagra*, *Levitra*, *Cialis* please contact the medical imaging department for instructions.
- You may be asked to attend an appointment before your scan where you will be examined and your heart rate monitored. If your heart is beating too fast for the scan, you may need to take a tablet (a beta blocker) that will help slow down your heart rate.

- Please tell the staff if you are or suspect you might be pregnant or are breastfeeding.

4. During the procedure

A needle (IV cannula) will be put into a vein in your arm. This will be used to inject the Contrast.

Your heart rate, blood pressure and oxygen levels will be monitored. If your heart rate has not slowed down enough for the scan you may be given an injection of a beta blocker. You may also be given medication to help open up your arteries.

The Radiographer will not be in the room during the scan, but will be able to see you and communicate with you via an intercom system.

As the x-ray tube rotates around you, you will hear a whirring or humming noise and you will feel the table move slowly through the CT scanner.

You should remain as still as possible, as the slightest movement can blur the pictures.

You will be asked to hold your breath for up to 20 seconds while the pictures are being taken.

5. After the procedure

The IV cannula will be removed.

Staff will discuss with you what level of activity is suitable after your procedure.

6. What are the risks of this specific procedure?

The main risks and complications with this procedure are associated with the drugs that are used. They can include but are not limited to the following.

Light headedness or dizziness, fatigue and weakness, shortness of breath, headaches, nausea, low blood pressure, dry mouth, blurred vision, and abnormal heart beat.

Other risks and complications of the actual procedure

Common risks and complications include:

- Minor pain, bruising and/or infection from the IV cannula. This may require treatment with antibiotics.

Less common risks and complications include:

- An allergy to injected drugs requiring further treatment.
- The procedure may not be possible due to medical and/or technical reasons.

Rare risks and complications include:

- An increased lifetime cancer risk due to the exposure to x-rays.
- Cardiac arrest.
- Death as a result of this procedure is very rare.

1. What is Iodinated Contrast?

The medical imaging procedure your doctor has asked you to have uses Iodinated 'Contrast' (once called X-ray dye). Contrast is a colourless liquid which includes iodine. Contrast is injected into your blood stream to allow your organs to be seen more clearly on x-rays. Contrast is not a dye. It does not stain the inside of your body. Your doctor needs to use Contrast to be able to get all the information needed to assist with your diagnosis.

This information sheet must be read together with the information sheet of the procedure you are booked for (if you do not have this information sheet please ask for one).

2. During the procedure

When the Contrast is injected you may feel:

- A very warm or 'flushed' feeling over your body, this may also make you think you have passed urine. You will *not* pass urine – it is only a feeling.
- A 'metallic' taste or smell may also happen. This usually lasts less than a minute.

3. After the procedure

It is recommended that you drink 2 to 4 glasses of water after your procedure to help flush the Contrast from your body.

Contrast does not affect your ability to carry out normal activities; you should be able to continue with your day as normal.

4. Precautions

Contrast is not suitable for some people; you will be asked a series of questions before it is given to you. Your answers allow staff to identify any risk factors that you may have.

- Please tell the staff if you are or suspect you might be pregnant or are breastfeeding.

Kidney function

- Contrast is removed from your blood by your kidneys through your urine. It is easily removed from the body of people who have normal kidney function.
- Giving Contrast to people with weakened kidneys (renal impairment), can cause further kidney damage, which may in turn cause the kidneys to stop working properly (acute renal failure).
- You may be asked to have a simple blood test to find out the level of their kidney function.

Diabetic Drug interactions - Metformin

(Other Drug names: Avandamet, Diabex, Diaformin, Formet, Glucohexal, Glucomet, Glucophage, Glucovance, Metforbell)

If kidneys suffer damage from the Contrast then the kidneys may not be able to remove Metformin from the body. It is safer to briefly stop taking Metformin when having Contrast. Staff will inform you when to stop and when it is safe to take Metformin again.

Contact your GP to monitor your diabetes if you are told to stop your Metformin.

5. What are the risks of Iodinated Contrast?

The risks and complications with this injection can include but are not limited to the following.

Common risks and complications include:

- No known common risks.

Less common risks and complications include:

- Injected Contrast may leak outside of the blood vessel, under the skin and into the tissue. This may require treatment. In very rare cases, further surgery could be required if the skin breaks down.
- Acute Renal Failure occurs when one or both of your kidneys suddenly stop working. Failure can last for days or weeks. It may take the kidneys a long time to regain their previous level of function and you may require dialysis to filter your blood during this time. There is a risk your kidneys could be permanently damaged. To reduce this risk the smallest possible dose of Contrast will be given.
- The injection may not be possible due to medical and/or technical reasons.

Rare risks and complications include:

- Allergic reactions occur within the first hour with most happening in the first 5 minutes. Late reactions have been known to occur up to a week after the injection.

Note: Allergy to topical iodine and/or seafood does not imply an allergy to Iodinated Contrast.

The reactions vary from:

Mild – hives, sweating, sneezing, coughing, nausea.

Moderate – wide spread hives, headaches, facial swelling, vomiting, shortness of breath.

Severe – Severe reactions are rare but include: life-threatening heart palpitations, very low blood pressure, throat swelling, fits and/or cardiac arrest.

- Death as a result of Iodinated Contrast is *very* rare.

6. What are the safety issues when you leave the hospital?

Go to your nearest Emergency Department or GP if you become unwell.