

The information below is intended for patients who are planning to undergo a **Computed Tomography (CT)** scan at Melbourne Radiology Clinic.

A CT scan, previously also referred to as a CAT scan, is a test that uses an X-ray machine that spins around the patient to obtain detailed images known as cross sectional imaging. This means that many images of the body are produced as if the body had been sliced and turned onto its side for viewing. Modern CT scanners can produce multiple slices of the body in one single rotation and as such are now referred to as Multi-Slice or Multi-Detector CT scanners. The sophisticated computer within the CT scanner is then able to stack these slices together to create a 3-Dimensional image of the body part that has been studied.

CT scanning is an excellent medical tool that is used to detect a whole range of disorders and can be used to scan most parts of the body. In particular, it may be used to diagnose subtle fractures, tumours, tiny kidney stones, strokes and even narrowing or blockages of arteries. CT can also be used to look at the lungs, major body organs and bowel.

## Preparation

The following CT scans require NO preparation:

- Spine (cervical, thoracic, lumbosacral)
- Extremity (hand, wrist, elbow, shoulder, hip, knee, ankle, foot)
- Kidneys-Ureter-Bladder – “KUB” (looking for kidney stones)
- Sinus/Facial Bones
- Dental/Dentascan
- Most brain scans
- HRCT Chest (note: If a standard CT chest or CTPA is also requested, these latter two require X-ray dye and hence the need to fast for 4 hours)

Unless otherwise specified at the time of booking, the **following scans need X-ray dye (also known as contrast – see below)** and therefore require fasting for 4 hours prior to the examination:

- Neck
- Chest
- Abdomen and Pelvis (also must arrive 30 minutes before appointment to drink 1L of water). This include CT examinations dedicated to liver (“triphasic liver”), pancreas and kidneys scans
- All Angiograms



**melbournerradiologyclinic**

**For All Appointments ph: 03 9667 1667**

**Melbourne Radiology Clinic**

ABN 68 134 592 911

3-6/100 Victoria Parade, East Melbourne VIC 3002

t 9667 1667 f 9667 1666

enquiries@melbournerradiology.com.au

[www.melbournerradiology.com.au](http://www.melbournerradiology.com.au)

- If you are to undergo an examination that requires X-ray dye in conjunction with another that does not (for example, a CT of the lumbar spine and CT of the abdomen and pelvis), then you must also fast for four hours.

**Please refer to the separate fact sheet and consent form regarding CT contrast (dye).**

Patients who have poor kidney function (renal impairment) will not be given contrast so as not to worsen the condition. Diabetic patients who are to undergo a CT with contrast must let the clinic know if they are taking the medication known as Metformin. If this is the case, you will be given special instructions.

Patients who have poor kidney function (renal impairment) will not be given contrast so as not to worsen the condition. Diabetic patients who are to undergo a CT with contrast must let the clinic know if they are taking the medication known as Metformin. If this is the case, you will be given special instructions.

### Information for Female Patients:

- **If you are pregnant, or it is possible that you may be pregnant**, then a CT scan is usually not performed unless it is an absolute medical necessity to do so. It is possible that an ultrasound or MRI scan may provide similar information and therefore be used as a substitute. Please inform our clinic if this situation applies to you.

## Procedure

- Patients undergoing a CT angiogram, CT of the neck, chest, abdomen, pelvis and spine will be asked to be changed into a gown. Patients undergoing a brain, dental, facial bones, sinus, wrist, elbow, foot, ankle or knee CT scan do not need to change.
- You will then be placed onto a table that will position you within the scanner. You must lie still during the scan as movement will blur the images, similar to when a moving object blurs a picture when taking a photo.
- A series of planning scans will be performed at the start which will localise which body part is to be imaged. The main part of the scan, which is when the images used for diagnosis are obtained, then follows and is usually over within a minute or two, sometimes within several seconds.

Depending on your examination, you may be asked by an automated voice to hold your breath. An injection of X-ray dye, known as contrast may need to be administered through a small plastic tube which has been inserted into an arm vein. Again, this depends on the examination that is being performed, however as a general rule, this is required for most CT examinations of the neck, chest, abdomen and pelvis. A CT scan looking for kidney stones only does NOT need this injection.



**melbournerradiologyclinic**

**For All Appointments ph: 03 9667 1667**

**Melbourne Radiology Clinic**

ABN 68 134 592 911

3-6/100 Victoria Parade, East Melbourne VIC 3002

t 9667 1667 f 9667 1666

enquiries@melbournerradiology.com.au

[www.melbournerradiology.com.au](http://www.melbournerradiology.com.au)

## Contrast

If you are to be given contrast, please refer to the fact sheet and consent form on the Melbourne Radiology Clinic website, or ask that this be emailed to you. Otherwise, you will be first provided with an information sheet when you arrive at Melbourne Radiology Clinic detailing the risks and benefits of the dye. This is then followed up by a brief questionnaire. The dye will only be given once you give your consent (permission) to do so, which will need to be formally documented on the information sheet with your signature. If it has been recommended to you by the staff at Melbourne Radiology Clinic that your scan requires dye it is because the information obtained during a scan with the dye yields significantly more information. We do understand however that no one likes needles, so if you have a particular objection to a needle or the dye, then naturally we may perform the scan without it.

All patients who have been administered dye need to wait in reception for 15 minutes before leaving in case there is a small chance of a delayed allergic reaction. Patients not administered contrast may leave immediately. Once you leave the clinic, you may resume normal activities and diet.

## Results

A radiologist, a medical doctor specialised in interpreting medical images for the purposes of providing a diagnosis, will then review the images and provide a formal written report. If medically urgent, or you have an appointment immediately after the scan to be seen by your doctor or health care provider, Melbourne Radiology Clinic will instantly have your results ready. Otherwise, the report will be received by your doctor or health care provider within the next 24 hours.

- Please ensure that you make a follow up appointment with your referring doctor or health care provider to discuss your results.

## REMEMBER ...

- Please bring to the clinic any prior scans (eg. X-rays, ultrasounds, MRI, CT) and reports as these will assist the radiologist in assessing your condition.
- If you have any further queries please call Melbourne Radiology Clinic on **(03) 9667 1667** – we are only too happy to help
- Please note that any referral for a scan is valid at Melbourne Radiology Clinic, even if it has been written on a referral form from another radiology provider.

Whilst every effort is made to keep your appointment time, the special needs of complex cases, elderly and frail patients can cause unexpected delays. Your consideration and patience in these circumstances is appreciated.

[Updated: 14/08/2010]

**For All Appointments ph: 03 9667 1667**

**Melbourne Radiology Clinic**

ABN 68 134 592 911

3-6/100 Victoria Parade, East Melbourne VIC 3002

t 9667 1667 f 9667 1666

enquiries@melbournerradiology.com.au

[www.melbournerradiology.com.au](http://www.melbournerradiology.com.au)