Information for Consumers - Renal Scan

This article tells you about a renal scan, the benefits and the risks, what happens before, during and after having the scan.

What is a renal scan?

A renal scan uses a machine called a gamma camera, and a special liquid (called a radioactive isotope) to make pictures of your kidneys.

The liquid is injected into your veins and pictures are taken using a gamma camera. This takes about 20 minutes. The liquid will pass out of your body in your urine or stool. You will not notice it as it is colourless.

You may also be given:

- A diuretic - medicine to make your kidneys work harder. More pictures will then be taken. This will take an extra 20 minutes
- Captopril - medicine to show if your high blood pressure is being caused by your kidneys. This is given one hour before the scan. You may also be asked to come back again 2 days later for a second scan. You will not be given Captopril for the second scan

Benefits of a renal scan

- Used to look at how your kidneys function
- Used to show blockages and other problems in your kidneys
- Can be used to show what is causing your high blood pressure

Risks of a renal scan

Your doctor knows the risks of having a renal scan. Your doctor will consider the risks before recommending you to have a renal scan. Possible risks are:

- Not recommended for pregnant women
- Some medications cannot be taken 2 to 4 days before a renal scan. These include ACE inhibitors. Please tell staff about any medications you are taking
- Small amount of radiation (from the radioisotope)
- Extremely small chance you could develop cancer in the long term from the radiation
- Infection at the site of an injection
- Captopril may cause your blood pressure to go low. Sometimes people feel dizzy or faint. Your blood pressure will be checked for one hour
- If you are breastfeeding, you may be required to stop for a period of time

If you have any allergies, tell the staff or nuclear medicine doctor.

If you are concerned about the risks, talk to your doctor before the examination.

Preparation for the scan

- Bring your referral letter or request form and all x-rays taken in the last 2 years with you
• Leave the x-rays with the Nuclear Medicine staff as the doctor may need to look at them. The staff will tell you when these are ready to be picked up
• Wear comfortable, loose clothing
• Leave all jewellery and valuables at home
• You may be asked not to eat for a few hours before the scan
• You will need to drink extra fluids and will be told how much to drink

Important to tell your doctor before the scan

• If you are or may be pregnant
• Any allergies and medical conditions you have
• Any medications you are taking

Approximately two days before your scan

• You may be asked to stop taking some of your medications

Just before the scan

• You may be given a gown to wear
• You may be asked to remove any metal objects
• You will be asked to empty your bladder

Consent

You have the right to refuse an examination and may do so if you wish. You may be asked to complete a consent form.

What happens during the scan?

Nuclear Medicine staff will put a needle into a vein in your hand or arm.

If you are having Captopril

The staff will give you a Captopril tablet to swallow and then they will check your blood pressure a few times. This will be done while you are lying down and will take about 1 hour.

All renal scans

Nuclear Medicine staff will inject a small amount of radioactive liquid through the needle in your hand or arm.

If you are having a diuretic

The staff will inject the diuretic through the needle in your hand or arm. If Captopril is given before the scan you will not require this.

The scan
You will be asked to lie on a bed. The pictures will be taken by the gamma camera underneath the bed. The staff will set up the camera and leave the room while the pictures are taken. They can see, hear and speak to you at all times. You will be able to speak to them at all times. You will need to keep still while the pictures are being taken.

When the scan is finished you will be asked to wait while the staff check the pictures.

The scan including getting you ready on the table will take one to two hours.

**When will I get the results?**

The Nuclear Medicine doctor will look at the pictures and write a report. The pictures may be on films or on a CD.

Ask whether you should wait to take the pictures and report with you, or whether they will be sent to your doctor.

Your doctor will need to discuss the report with you. You will need to make an appointment to do this.

**After the scan**

You will be able to leave soon after the scan is finished and can continue with normal activities.

- Staff will remove the needle in your arm
- Staff will give you any special instructions
- The radioisotope will pass out of your body in your urine within 2 days. You will not notice it as it is colourless
- Drink plenty of fluid
- To help get rid of the radioisotope
- For 24 hours after if you had a diuretic, so that you do not become dehydrated

**Costs**

For an Australian patient in a Public Hospital in Western Australia

- Public patient - no cost to you unless advised otherwise
- Private patient - costs can be claimed through Medicare and your health insurance provider

For a patient in a Private Hospital or Private Imaging Site in Western Australia or a patient outside Western Australia

- Ask your doctor or the staff where you are having your test done what the cost will be

**Further information**

For more detailed information please access renal scan from InsideRadiology at: www.insideradiology.com.au

This is a resource produced especially for consumers by the Royal Australian and New Zealand College of Radiologists: www.ranzcr.edu.au
A guide to gathering information that you may need for making informed decisions is published by the Consumers' Health Council of Australia at: https://chf.org.au

If you would look at another relevant article, please access the following: Radiation risks of x-rays and scans

Or for other relevant information access the Diagnostic Imaging Pathways website at: www.imagingpathways.health.wa.gov.au/index.php/consumer-info

Or if you have questions or require any further information please contact your doctor or speak to the staff where you are going to have your procedure.

**Consumer participation**

This information has been reviewed by representatives from the following groups:

- Aboriginal people
- People with disabilities
- Seniors
- CALD (Culturally and Linguistically Diverse)
- The Health Consumers' Council

**Feedback**

All feedback, comments and suggestions regarding consumer information at Diagnostic Imaging Pathways are welcome. Please direct them to the following email address: dipfeedback@health.wa.gov.au

**Disclaimer**

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