

Renal Captopril Study



Disclaimer

This is general information developed by The Ottawa Hospital. It is not intended to replace the advice of a qualified health-care provider. Please consult your health-care provider who will be able to determine the appropriateness of the information for your specific situation.

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What is a Renal Captopril study?

Your physician has requested an examination called a "Captopril renal study". This procedure is used to determine specific information about the blood supply and function of your kidneys. This procedure usually involves two stages that will take most of the day to complete.

Before the scan

When your procedure is scheduled; the booking clerk will verify all medications that you are taking to ensure that none of them will interfere with the procedure. If you are taking any medications that may interfere, you will be asked to check with your physician before stopping them. Please bring with you a list of any medications you are taking. One hour before leaving home please drink approximately 1 litre (4 cups) of water. You may empty your bladder as required.

What is involved?

This procedure will take most of the day to complete and involves two parts: a baseline study and the Captopril Study.

Baseline Study (1 to 1.5 hours in length): When you arrive to the nuclear medicine department, a technologist will explain this procedure to you in full detail. The technologist will also ensure that you are not taking medications that will interfere with the study before starting. You will then be asked to lie down on a table and a special detector, called a gamma camera, will be positioned under the table directly below your kidneys. A technologist will then inject a radioactive substance into a vein in your arm and the camera will take a series of pictures for 30 minutes. The amount of radioactivity is very small and will have no adverse effect on you. **Captopril Study** (2 hours in length): The second part of this procedure is identical to the first except that it requires that you take a medication before starting. The technologist will give you a small tablet called Captopril. Captopril is a blood pressure medication that may assist in detecting any narrowing of the arteries supplying blood to your kidneys. This medication takes approximately one hour to take effect. During this hour you will be required to rest quietly and the technologist will check your blood pressure regularly. After the hour's rest you will be positioned on the scanning bed, where you will receive a small injection into a vein in your arm. This injection contains a small amount of the same radioactive substance as for the first set of images. The technologist will then image your kidneys for 30 minutes. Once all of the images are complete, the technologist will process your study and a specially trained physician will interpret them.

Will it hurt?

Only the 'pinprick' of the injection needle may hurt a bit. You may have had a blood test in the past. This is much the same.

Is the radiation dangerous?

The radioactivity will disappear by itself soon after the scan is finished (nearly all of it disappears within one day, any remaining traces disappear within one week). The amount of radiation is similar to that from an x-ray examination.

Do I need to do anything after the scan?

No. You can eat normally and go where you wish. If you wish, you could drink a bit more than normal for the rest of the day. This will help wash the radioactivity out of your body more quickly. If you are travelling abroad in the seven days after your scan, please ask us for further advice. Ports and airports have very sensitive radiation detectors which may pick up tiny amounts of radioactivity remaining after your scan. Please advise us if you will be leaving the country in the near future, and we will give you a letter that you can show to customs officials at ports or airports.

What happens to the results of the scan?

A doctor will examine the pictures. This is normally done at the end of the day or early the next day. A report is then sent to the doctor who asked us to do the scan.

Is there anything I should tell the staff before the scan?

Yes, if you are pregnant or think you may be pregnant, please telephone us to let us know. If you are concerned that a medication you are taking may affect the results, then please check with the technologist performing your test before you start. Also, please telephone us if you are breastfeeding.

What if I have more questions?

The staff of the department wants your visit to be as pleasant as possible. If you have any questions, please ask the staff in the nuclear medicine department. You can telephone before your test day, or ask before the scan starts. **Our telephone number is 613-761-4831, ext. 8.**