

Patient Information Leaflet

DMSA Scan (Tc-99m)

Introduction

A DMSA scan is a nuclear medicine exam done to examine the kidneys. It involves an injection of a small amount of radioactivity. You will be required to stay near the department for approximately 5 hours.

Preparation

There is no special preparation for this scan, you can eat and drink normally before it.

The injection will not impair your ability to drive a vehicle.

Pregnant women or children should not attend the appointment with you.

Ensure that you are well hydrated.

Women of childbearing age

This scan should be scheduled within 28 days of the commencement of your last menstrual period to avoid inadvertent irradiation of a foetus. If your period is overdue, your appointment may be rearranged.

Scan

On arrival you will be given the isotope injection into a vein in your arm. This injection should have no side effects. You will then have to wait for 4 hours before your scan is taken. During the waiting period you will be free to leave the hospital if you wish.

When you return, it will take approximately 30-40 minutes to complete your scan. You will be asked to lie on a table whilst the camera moves around your body.

Radiation precautions after the scan

Some of the isotope will remain in your body for approximately 24 hours after your scan is complete. To minimise the radiation dose to yourself and others, you should take the following precautions during this period:

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1. Drink plenty of fluids and empty your bladder as frequently as possible. When using the toilet you should avoid spills, flush the toilet twice and wash your hands thoroughly. You should sit on the toilet when passing urine.
2. If possible, avoid close contact with pregnant women, infants and children for 24 hours after your injection.
3. If you are a nursing mother express and discard breast milk for 24 hours after your injection. You may resume normal breast-feeding after this time.
4. You should postpone any other medical tests or procedures for 24 hours after the injection where possible.

Medical radiation: risks v benefits

We are all exposed to natural background radiation every day. Medical exposures give a small additional dose on top of natural radiation.

The amount of radiation received during a nuclear medicine procedure is low, resulting in the equivalent of approximately a few months to two year's background radiation.

The only effect on the patient that is known to be possible at these low doses is a very slight increase in the chance of cancer occurring many years or decades after the exposure.

As long as it is clearly necessary to help make the correct diagnosis and treatment decision, the benefits of detection, diagnosis and treatment resulting from the nuclear medicine examination should outweigh these small radiation risks.