

Patient Information Leaflet**VQ Scan (Tc-99m)**

A VQ scan is a nuclear medicine exam that uses a ventilation (V) scan to measure air flow in your lungs and a perfusion (Q) scan to assess the blood flow in your lungs.

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.

You must have had a recent chest xray taken within 24 hours of the VQ scan. If you have not, we can arrange a chest xray for you when you arrive in the department.

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 asked to sit in a room and the radiographer will explain the exam to you. You will first be asked to breathe in an odourless, tasteless gas through a tube for about 5 minutes. You will then be asked to lie on the scanner table whilst the camera moves around your chest. You will be asked to rest your arms above your head for the duration of the scan. If you can't raise your arms above your head, we can do the scan with your arms by your side. The scan can take up to 1 hour.

When this scan is complete, you will be given the isotope injection into a vein in your arm. You will be asked to rest your arms above your head again. The scan will take no more than 15 minutes.

Patient Information Leaflet

A comparison is then made between the ventilation and perfusion scan so it is important that you remain still for both of your scans.

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:

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.

Patient Information Leaflet

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.