

VQ Scan

Consumer Information

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What is a Nuclear Medicine VQ Scan?

A VQ (Ventilation-Perfusion) scan is a nuclear medicine scan that uses a radioactive material (radiopharmaceutical) to look at airflow (ventilation) and blood flow (perfusion) in the lungs. See [Nuclear Medicine](#) for more details.

The aim of the test is to look for evidence of any blood clot in the lungs, called pulmonary embolism (PE) that lowers oxygen levels in the body, results in shortness of breath and sometimes can be fatal, particularly if left untreated.

How do I prepare for a VQ Scan?

There is no preparation for a VQ Scan other than having a recent chest X-ray examination. Your referring doctor will discuss this with you.

If you think you may be pregnant or are breast feeding you must inform your doctor or specialist who is referring you for the VQ Scan and the radiology staff where you are having the VQ Scan. They will discuss with you any need to stop breast feeding and minimise your contact with your baby for a short time.

What happens during a VQ Scan?

You will be given a small dose of radioactive material (radiopharmaceutical) to breathe in through a nebuliser for a few minutes, with guidance from the nuclear medicine technologist who is performing the scan. A nebuliser is a small machine that takes liquid substances and changes them into an aerosol or mist that is inhaled, usually through a tube-like mouthpiece or a special mask that fits over your nose and mouth.

You will then lie down on a table and images of your lungs will be taken at multiple different angles by a gamma camera, which is a specialised nuclear medicine camera that detects the radioactive material and takes images that show the lungs.

When a set of images has been taken, the technologist will inject a different radiopharmaceutical into a vein in your arm. A second set of images of your lungs will then be taken.

The entire imaging process will take between 30-60 minutes. During the time when the images are taken, you will be asked to not move; otherwise the

pictures will become blurry and may need to be repeated. You will be asked to breathe quietly, but not hold your breath. The technologist will ensure that you are comfortable throughout the whole process.

The item on [Nuclear Medicine](#) provides more details about all of these steps.

Are there any after effects of a VQ Scan?

There are no after effects from a VQ Scan. The radioactive solution used in a VQ Scan is not known to cause any side effects or adverse interaction with food or medication you may have been prescribed.

How long does a VQ Scan take?

A VQ Scan takes approximately 1 hour to complete.

What are the risks of a VQ Scan?

There are no risks involved in the VQ Scan procedure itself.

The test involves exposure to ionising radiation (see [Radiation Risk of Medical Imaging in Adults and Children](#)).

If you are pregnant the test can still be performed following consultation with your nuclear medicine physician or nuclear medicine specialist. The specialist doctor will arrange a reduced dose of radioactive tracer so that it will not affect the developing foetus (unborn baby).

If you are breast feeding, it is advised that you stop breast feeding for the 24 hours following the scan and during this time your milk should be expressed. However, it need not be discarded as any radioactivity in the milk will disappear after 24-36 hours. This is so that your baby is not exposed to ionising radiation unnecessarily.

What are the benefits of a VQ Scan?

The benefits of a VQ Scan are:

1. The test is readily available, easy to perform and is non-invasive, that is, it does not involve surgery.
2. It is a relatively good test to look for or exclude blood clots in your lungs if your medical history and current medical condition or symptoms indicate this test will provide the information your doctor needs to diagnose or treat your condition.

Who does the VQ Scan?

The VQ Scan is performed by a nuclear medicine technologists. The images generated by the technologist are analysed by a nuclear medicine specialist who provides a written report to the doctor who referred you for the VQ Scan.

Where is a VQ Scan done?

Most large public and private hospitals and private radiology or nuclear medicine practices have nuclear medicine facilities where VQ scans are performed.

When can I expect the results of my VQ Scan?

The time that it takes your doctor to receive a written report on the test or procedure you have had will vary, depending on:

- the urgency with which the result is needed
- the complexity of the examination
- whether more information is needed from your doctor before the examination can be interpreted by the radiologist
- whether you have had previous X-rays or other medical imaging that needs to be compared with this new test or procedure (this is commonly the case if you have a disease or condition that is being followed to assess your progress)
- how the report is conveyed from the practice or hospital to your doctor (in other words, email, fax or mail)

Please feel free to ask the private practice, clinic, or hospital where you are having your test or procedure when your doctor is likely to have the written report.

It is important that you discuss the results with the doctor who referred you, either in person or on the telephone, so that they can explain what the results mean for you.

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Please note:

This information is of a general nature only and is not intended as a substitute for medical advice. It is designed to support, not replace, the relationship that exists between a patient and his/her doctor. It is recommended that any specific questions regarding your procedure be discussed with your family doctor or medical specialist

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