



Royal Hospital Nuclear Medicine Department

Ventilation Perfusion (V/Q) Lung Scan

Patient information sheet

How Nuclear Medicine Works

Nuclear Medicine exams can help to assess how well your organs are working. Hence, it is different from other areas of radiology, which create images of the body anatomy. During a nuclear medicine procedure, you will receive an injection of a radioactive material called a radiopharmaceutical. When the radiopharmaceutical reaches the right area, a special machine called a gamma camera will take pictures of the area of interest.

What is a V/Q Scan?

It is a study that uses radiopharmaceutical to examine airflow (ventilation) and blood flow (perfusion) in the lungs. The aim of the scan is to look for evidence of any blood clot in the lungs, called pulmonary embolism (PE). Also, it is used to localize the area of lung hyperxia, and help surgeon to decide for pneumonectomy.

What involved in this test?

The lung scan will be done in two parts:

PART 1:- Perfusion:

- A technologist will ask you to lie down on a scanner bed and a small amount of radiopharmaceutical (Tc-99m MAA) for perfusion will be injected into a vein in your arm or hand.
- Images of your lungs will again be taken. This time, the images will show the blood supply to your lungs. About 15 minutes is required to takes these images.
- Once completed, the images will be shown to a Nuclear Medicine Specialist, who may then decide to start the second part of the test.

PART 2:- Ventilation:

- For the ventilation images, you will be asked to breathe a small amount of

radioactive gas. This will show the air flow to your lungs.

- Once enough gas has been deposited in your lungs, images of your lungs will be taken. About 15 minutes are required to takes these images.

What happens after the test?

There are no known side effects from the test. You may resume your normal activities once the examination is complete. The report will be sent to your doctor.

Preparation

- There is no preparation required for this test
- If you have not a chest X-ray done within 24 hours of the lung scan, you may be sent for one after the study is complete.

For female patients

- If you are pregnant, please tell the technologist before you are injected with the radioactive tracer.
- Please consult your technologist if you

Your **V/Q** Scan has been scheduled for _____ at _____

If you have any questions or concerns about the test, or if you need to cancel or reschedule your appointment, please contact the **Nuclear Medicine Department** at 24627069

Nuclear Medicine Department is located on the Ground floor in the Oncology Centre

Please check in with nuclear medicine reception 15 minutes before your appointment.

are breastfeeding for further instructions.

