

Nuclear Medicine Lung (V/Q) Scan in Pregnancy

Information for patients, relatives and carers

① For more information, please contact: Radiology Department,
York Hospital, Wigginton Road, York, YO31 8HE

Nuclear Medicine
Telephone: 01904 725936

About this leaflet

In this leaflet we tell you about the procedure known as a Nuclear Medicine lung scan, also called a V/Q scan. We explain what is involved and what the possible risks are. The information in this leaflet is not meant to replace informed discussion between you and your doctor, but can act as a starting point for such a discussion.

What is a lung (VQ) Scan?

This is a type of scan that uses a radioactive tracer to enable us to image your lungs, in order to help diagnose pulmonary embolism (PE), which is a clot in the lungs.

Are there any alternatives?

CTPA (a CT scan of the blood flow to the lungs) is the usual scan used to diagnose a PE, but this scan can't be used on some patients with kidney problems or contrast allergies. A V/Q scan is an alternative to the CT scan for these patients, but a V/Q scan is also sometimes preferred during pregnancy because it gives a lower radiation dose to the breast tissue (which is more sensitive than usual to radiation during pregnancy).

What preparation is needed before the lung scan?

There is no special preparation needed for this test so you may eat and drink normally.

You may be sent for a chest x-ray before your scan, if you have not had one done in the last few days, for which you will be asked to remove your clothes from the waist up and be given a hospital gown to put on. You will not be asked to remove your clothes for the scan, but you will be required to remove metal items such as belts, keys and coins. Buttons and zips are fine. What happens during the lung scan?

You will be asked to lie flat on your back on a bed under the gamma camera. The test is done in two parts. The first part of the test involves taking pictures of your breathing. You will be asked to breathe through a mouthpiece attached to a machine for a few breaths. The air contains a radioactive tracer that goes into your lungs and shows up on the gamma camera that takes the images.

The second part of the test examines the blood supply to your lungs. For this you will be given a small injection into a vein in your arm.

The injection contains a small dose of a radioactive tracer, which is taken up into your lungs through your blood supply. Further images are taken on the gamma camera. The scanning procedure is not painful, and you will be awake throughout.

The whole test takes about 30 minutes.

What happens after the lung scan?

After the scan you will be free to leave the Nuclear Medicine department and to eat and drink normally.

Are there any risks or complications?

Nuclear Medicine procedures are very safe diagnostic imaging tests. Side effects from the gas and injection are extremely rare and when they do occur are mild, for example rash, itching and nausea or headache and pass after 48 hours.

The amount of radioactivity involved is very small, and after 24 hours most of the radioactive tracer will have passed out of your body. There is radiation in the air and ground all around us called background radiation. Most radioisotope scans give you on average the equivalent of a year's background radiation.

All radiation to the foetus carries some risk. The risk must be balanced against the risk to the mother and foetus if a PE is not diagnosed or treated.

The risk to the baby of developing a childhood cancer as a result of a lung scan is one in 280,000. The risk of any child developing a cancer in childhood is one in 500, so any additional risk from the lung scan is very small.

Further guidance has been published by Public Health England, visit website <https://www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice>.

Results

A report will be sent to the doctor who asked us to do the test. They will then let you know the results.

What if I have any other questions?

If you have any worries or questions about your scan, please feel free to telephone us on 01904 725936 and we will be happy to answer any questions you may have.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Nuclear Medicine, Radiology Department, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725936.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net

An answer phone is available out of hours.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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