Patient Information Leaflet

York and Scarborough Teaching Hospitals NHS Foundation Trust

Nuclear Medicine Lung (VQ) Scan

Information for patients, relatives and carers

ⓘ For more information, please contact: Nuclear Medicine, Radiology Department, York Hospital, Wigginton Road, York, YO31 8HE
Telephone: 01904 725936

About this leaflet

In this leaflet, we tell you about the procedure known as a nuclear medicine lung scan. This is also referred to as a VQ 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 scan?

This is a nuclear medicine diagnostic imaging test that uses a radioactive tracer to take images of your lungs.
It is used to diagnose or rule out a pulmonary embolism (PE).

Are there any alternatives?

The alternative to a lung scan is a CTPA scan. The advantage of a CTPA scan is that it can diagnose other lung conditions, which may be causing your symptoms, whereas a lung scan can only diagnose PE. You may have a lung scan if you have an allergy to the contrast agent that is used in a CTPA scan.

The advantage of a lung scan is that is gives a slightly smaller radiation dose to the breasts. If you have any concerns, please discuss them with the doctor who referred you to us.

What preparation is needed before the lung scan?

There is no special preparation for the scan so you can eat and drink normally. If you have not had a recent chest x-ray, we may send you for one before you have your lung scan.

If possible, please wear comfortable clothing that doesn't have any metal on it. This avoids the need for you to change into a hospital gown for the scan.

What happens during the lung scan?

When we take you in to the scanning room we will explain what the lung scan involves and you will have the opportunity to ask questions.

We will ask you to lie on a bed on your back and the bed moves you into the gamma camera. The lung scan is in two parts. The first part looks at your breathing and the airflow into your lungs. To look at the airflow we need you to breathe in some slightly radioactive gas through a mouthpiece. The gas sticks in your lungs so that we can take images of the air distribution. The gas does not taste of anything, and it will not make you feel any different. Once the gas is in your lungs, we do a scan where the gamma camera moves around your chest. You can relax and breathe normally while the scan is in progress.

The second part of the scan looks at the blood supply to your lungs. You will be given a small injection, usually into a vein in your arm.
The injection contains a small amount of a radioactive tracer, which shows the blood flow to your lungs. Again, the injection should not make you feel any different. Side effects are very rare. Once the injection has been given, we repeat the first scan.

After the lung scan, we sometimes do a CT scan (a CT scanner is attached to the gamma camera) of your chest which can provide additional information for your doctor.

The whole test takes about 30 minutes.

What happens after the lung scan?

After your scan, you will be free to leave the nuclear medicine department.

We recommend that you drink plenty of fluids for the rest of the day to help flush any remaining radioactivity out of your body.

Are there any risks or complications?

Nuclear medicine procedures are very safe diagnostic imaging tests. Side effects from the radioactive tracers are extremely rare.
The amount of radioactivity involved is 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 or less.

If you are breastfeeding, you will be asked to stop for 13 hours after your scan. This is because some of the radioactive injection goes into breastmilk. You will be asked to express the milk and throw it away. Breastfeeding can continue as normal after 13 hours.

Results

The results will go back to the doctor who referred you for the scan.

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 726696 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, 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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