LUNG VENTILATION AND PERFUSION SCAN

Purpose of the study

A gamma scan of the lungs is used to detect possible blood clots in the lungs or the discovery and detection of other diseases affecting the circulation of the lungs.

Preparing for the study

- You can eat and drink normally
- Take your medication as usual
- The full examination is generally not performed on a pregnant woman. A lung perfusion scan can be performed if necessary.

What to expect at the study

A lung scan is a three-part examination. You will receive two different radioactive isotopes as research substances. You will not sense these tracers.

First, we will do a lung ventilation scan, which takes about 20 minutes. For the scan, you will need to breathe a gaseous tracer into your lungs for a short period. This allows us to see how air reaches different parts of the lungs.

As soon as the first scan is complete, you will receive the second tracer into the vein of your arm. This is used to image blood circulation in the lungs, which is called lung perfusion. The scan takes about 15 minutes.

Finally, immediately after the first scans, a CT scan is performed to clarify the findings. The CT scan only takes a few minutes. During all the scans, you need to lie still on your back.

Duration of the study

The study takes about 1 hour. Those who are coming from home should also allow at least half an hour for the examination results to be prepared.

Study results

Patients in the ward will receive the test results from the doctor of the department or clinic that referred them.

Patients coming from home must stay at the nuclear medicine department for a while after the examination to wait for the results.

After the study

You will emit a small amount of radioactivity into your immediate environment after receiving the tracer. After the scan, you should drink plenty of fluids after the study and empty your bladder more often than usual so that radioactivity will leave your body through urine.

For one day after the study, you should avoid holding children or being next to them for more than half an hour total. Avoid also close contacts with pregnant women. Anyone will be completely safe from the radiation at a distance of two metres. The radiation will dissipate spontaneously by the following day.

Updated 11.2.2026