

#### **PULMONARY VENTILATION SCINTIGRAPHY**

Scintigraphy is an imaging technique used to evaluate the metabolic processes in the tissues and lesions of the human body. A small amount of radiolabelled substance will be injected into the patient's body to obtain an image. In the present case, it is a technetium-99m-labelled DTPA aerosol that accumulates in the alveoli.

At the same time, computed tomography (CT) will be performed.

## Indications for the test:

- confirmation of the diagnosis of pulmonary embolism and pulmonary infarction (also an intolerance to contrast media due to allergy or kidney failure);
- chronic obstructive pulmonary disease;
- assessment of functional residual capacity of the lungs prior to surgical treatment of pulmonary diseases;
- due to the lower radiation load, this test is preferred to computed tomography with an analogous purpose.

# The test does not require special preparation.

# The procedure

The duration of the procedure, including preparation, is about 30–45 minutes. Before the test, a nurse will speak to you and provide a detailed explanation of the procedure.

You will be asked to drink a glass of water. After that, you will be required to breathe in a radioactive aerosol through a special device for 3–5 minutes. The nurse will position you on your back on an examination table. The recording will start immediately and last for 20 minutes. During the recording, you will be asked to lie still.

### After the test:

- eat normally; it is advisable to drink plenty of fluids to accelerate the excretion of the tracer through the kidneys;
- breastfeeding should usually be discontinued for 24 hours; removed breast milk should be discarded. Detailed instructions will be given to you by the personnel in the department;
- on the study day try to avoid close (less than 1 metre) and long lasting (over quarter an houre) contact with children and pregnant women;
- study results will be sent to referring physician within a week. If you have a doctor's appointment on the same day or the following day, please inform the study personnel.

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