

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 substance, which builds up in the heart muscle and makes it possible to assess the homogeneity of the blood flow to the heart muscle.

At the same time, computed tomography (CT) will be performed to show areas of the heart muscle which are otherwise difficult to visualise.

**Indications for the test:**

- assessment of the homogeneity of the blood flow to the heart muscle;
- diagnosis of coronary artery disease, identification of the extent of the disease and assessment of treatment efficacy.

**Contraindications for the test:**

- unstable angina;
- simultaneous adenosine test – allergy to adenosine;
- simultaneous exercise tolerance test – contraindications to exercise tolerance testing are assessed individually for each patient.

**Inform your doctor and medical staff if:**

- you have experienced claustrophobia or the fear of enclosed spaces;
- you are pregnant, breastfeeding, or come into close contact with children or pregnant women following the procedure;
- there are circumstances that prevent you from undergoing an exercise tolerance test;
- you are unable to lie still.

**Preparation for the test:**

- do not drink coffee or other caffeinated drinks 8 hours before the test;
- do not eat or smoke 4 hours before the test;
- you will receive detailed instructions from your doctor about how to take your medications. Follow these instructions.
- After certain parts of the testing, you will be asked to eat something. Bring two small cups of yoghurt or two curd snacks or sour cream or sandwiches with you to the test. You can also buy food from the hospital store or café.

## **The procedure**

The test, including preparation, lasts about 4–6 hours and consists of two stages.

Upon arrival in the department, you will receive a detailed explanation of the procedure and will be asked questions about the previous state of your health. Also, an intravenous cannula will be inserted. The test will begin with an exercise tolerance test or an adenosine test. Depending on the test, a tracer will be injected either on a walking track or after the administration of adenosine. After the tracer has been injected, you should wait at least 60 minutes for it to accumulate in the heart muscle. After that, the first recording will be performed and will last up to 30 minutes.

You will then be injected once again with the radioactive tracer to assess the blood flow to the heart at rest. The next recording will be performed in 1 hour and will last up to 30 minutes.

During the recording, you will be asked to lie still to ensure a high-quality result.

**NB!** About half an hour before each recording, eat yogurt, a curd snack or other food you brought with you or bought from the hospital store or café.

## **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 hour) 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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