

Myocardial perfusion scintigraphy

Purpose of the study

The study evaluates the function and circulation of the heart muscle at rest and during exercise. In addition, the left ventricular function of the heart is assessed.

Preparations

The referring physician provides instructions regarding medication. If no specific instructions have been given, you can take your normal medications. However, note that:

- A 48-hour break must be taken in medications containing dipyridamole (Persantin depot, Asasantin retard, Atrombin, Dipyryn).
- A 12-hour break must be taken in medications containing theophylline (Aminocont, Nuelin, Retafyllin, Theofol).
- Medications for erectile dysfunction affect blood circulation, and their use should be avoided for three days before the examination.
- If you have received a COVID-19 vaccine within three days before this study, contact the department of nuclear medicine (contact details below). As a precaution, extreme physical exertion should be avoided for three days after the COVID-19 vaccination.
- Do not apply lotion to the skin of the chest the night before or on the morning of the examination day.

The following substances should not be used before the study:

- **Caffeine-containing products are strictly prohibited 24 hours before the examination (Coffee, Tea, cocoa, cola or energy drinks).**
- Smoking for 4 hours.
- Alcohol for 48 hours.

The night before the study should be spent resting well. On the morning of the study, you can have a light breakfast. If you suspect that you are pregnant or breastfeeding, inform the receiving nurse. In such a case, certain precautions must be followed.

The study will be postponed if the instructions are not followed.

Arriving to the study

If you are prone to discomfort after exercise, do not come to the study by driving. Coming by bicycle or walking a long distance disturbs the performance of the test and is not recommended. The central hospital can be reached, for example, by bus from the market square.

Study protocol

First examination day (exercise phase)

Bring a lightweight exercise outfit for the exercise (e.g., shorts and sneakers). Women should also bring supportive bras.

The study is performed at the physician's decision either by cycling on exercise bike or pharmacologically (regadenoson). The radiopharmaceutical used in the study is administered as an injection into the vein of the forearm towards the end of the exercise.

About 20 minutes after the exercise, imaging will begin. During the imaging, you can wear your own clothes as long as they don't have metal in them. The imaging is done in a lying position and usually lasts about 30 minutes. It is advisable to allocate 2-3 hours for the entire study.

Second examination day (rest phase)

The examination continues as needed on a different day with a resting phase, during which you will be given a nitroglycerin tablet. About half an hour after receiving the tablet, you will be given a dose of radiopharmaceutical into your forearm vein. Imaging will begin approximately 20 minutes later. The imaging process is similar to the previously conducted exercise phase imaging. Allow approximately 2 hours for the entire study.

After the study

A physician will provide a statement on the study, which will be directed to the clinic or department that made the referral. The referring unit will take care of any further actions.

Notice

You will be administered a small amount of radioactive material that radiates within you, therefore you should keep a distance to children and pregnant women for the next 24 hours after both examinations. After 24 hours the radioactive material has exited your body and you are no longer radiating.

Please do not wear any perfume when coming to the department as it may cause severe symptoms to patients with asthma or allergy!

Contact information

Department of nuclear medicine and PET
Satasairaala, Building A, floor 0
Phone number 02 627 7361
from Monday to Friday between 7.00–14.30

List of medications

Write here the names of the medications you are currently taking and last time you took them:
