

Bone metabolism PET-CT

Purpose of the study

The study aims to locate, among other things, cancer tumors and their metastases, as well as inflammatory changes. The study uses radioactive sodium fluoride as the radiopharmaceutical.

PET-CT study involves both positron emission tomography (PET) and computed tomography (CT) imaging during the same visit. PET is used to examine the body's metabolism, while CT provides a detailed image of the body's structure.

Preparations

No specific preparations are required. You can eat, drink, and take your medication as usual.

The study is generally not performed on pregnant women. If you suspect you might be pregnant, please inform the staff before the study. The study can be performed on a breastfeeding mother, but a breastfeeding break (12 hours) should be observed after the study.

Study protocol

You will be given a questionnaire to fill out. The nurse will go over the details of the study with you.

A venous cannula (drip) will be inserted into your forearm for administering the radiopharmaceutical. You will be directed to a resting room to lie down. The waiting time before the administration of the radiopharmaceutical is $\frac{1}{2}$ - 2 hours. The study, except for the venous puncture, is painless and has no side effects.

The radiopharmaceutical used is a radioactive tracer that accumulates in the bones. After the administration of the radiopharmaceutical, there is a waiting period for the tracer to accumulate in the imaging target. The waiting time is approximately 60 minutes. The waiting period is spent in the resting room.

The imaging is done in a supine position on the PET-CT scanner bed, which moves through the opening of the camera. You can wear your own clothes without any metal for the study. Staying still is necessary for the success of the study. The imaging takes about 30 minutes.

The total duration of the study visit, including the waiting time, is 3-4 hours.

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

There are no side effects associated with the PET radiopharmaceutical, but it emits a mild radiation for a few hours. However, no radiation protection measures are usually necessary. It is recommended to drink more water than usual after the study because the radiopharmaceutical is eliminated from the body through urine.

Avoid close contact with pregnant individuals and holding or being close to children on the day of the study for approximately 8 hours.

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

SataDiag
[SataDiag website www.satadiag.fi](http://www.satadiag.fi)

Pre-study questionnaire for PET imaging

Please fill out the form the day before the examination and bring it with you when you come for the study.

Name: _____ **Weight:** _____

Personal identity code: _____ **Height:** _____

Have you experienced any hypersensitivity reactions to contrast agents during previous imaging procedures?

No Yes

Have you undergone any surgeries, endoscopies, or biopsies within the past six months?

No Yes Which, when? _____

Have you received the following medications within the past 2 weeks?

- Cortisone
- blood cell growth factor
- cytostatic agent

Have you received radiation therapy within the past 3 months?

When? _____

to which area? _____

Do you have or have you had...

- Diabetes. Current diabetes medication in use: _____
- Myocardial infarction
- Renal disease
- Tuberculosis
- Gastroenteritis
- Other inflammatory disease, which? _____
- Other chronic disease, which? _____
- Trauma (fracture, injury), which? _____

Have you received the COVID-19 vaccine?

- No Yes, when? _____
- Left arm
- Right arm

Question for women: Is it possible that you could be pregnant?

No Yes

Start date of your previous menstrual period? _____