Parathyroid PET-CT

Purpose of the study

The study aims to locate overactive parathyroid glands. The study uses radioactive fluorocholine, 18F-FCH, as the radiopharmaceutical.

PET-CT imaging combines positron emission tomography (PET) and computed tomography (CT) in a single session. PET is used to study the body's metabolism, while CT provides detailed structural images of the body.

Preparations

On the day of the study, you can take your regular prescribed 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 conducted on breastfeeding mothers, but a breastfeeding break of 12 hours is required after the study.

Please do not bring small children with you to the appointment.

CT imaging may require the use of iodine-based contrast agent, which is administered during the scan. If you have had a previous reaction to contrast agents, please inform the staff before the study. The PET radiopharmaceutical is necessary for the scan, but the CT scan can be performed without iodine-based contrast agent.

Study protocol

You will be given an interview form to fill out. A nurse will go over the details of the study with you.

A vascular catheter (drip) will be placed in your forearm vein for the administration of the radiopharmaceutical. You will be directed to a resting room for bed rest. The waiting time before administering the radiopharmaceutical is ½ to 2 hours. The study, except for the injection, is painless and does not have any side effects.

The study uses a radioactive tracer. After administering the tracer, a waiting time of approximately 60 minutes is required for the tracer to accumulate in the imaging area. You will continue to wait in the resting room during this time.

The imaging is performed while lying on your back on the PET-CT scanner bed, which moves through the opening of the camera. You can wear your own clothes for the scan, as long as

they do not contain any metal. It is important to stay still for the success of the study. The imaging takes about 30 minutes. Overall, you should allocate about 3-4 hours for the entire study, including breaks.

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 imaging agent, but it emits a mild radiation for a few hours. However, usually no radiation protection measures are necessary. After the study, it is advisable to drink more water than usual, as the imaging agent is eliminated from the body through urine.

On the day of the study, try to avoid close contact with pregnant individuals and holding or being near children 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 7.00–15.00

SataDiag
SataDiag website 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? _____