

Brain metabolism PET-CT

Purpose of the study

The study aims to locate abnormalities in different areas of the brain associated with Alzheimer's disease. Radioactive tracer is used to evaluate the accumulation of β -amyloid plaques in the brain.

Preparations

You can eat, drink, and take your prescribed medications as usual. Generally, pregnant women are not subjected to this study. If you suspect that you might be pregnant, please inform the staff before the study.

Study protocol

You will be asked to lie down for approximately 1-2 hours. During this time, you are not allowed to move, read, or use your phone.

A small amount of radioactive tracer will be injected into your bloodstream through an intravenous line in your arm. The scan will begin after approximately 1.5 hours and will last for about 30 minutes. The scans will be conducted while you are lying down, and they are painless.

In addition to the PET scan, a CT scan (computed tomography) will also be conducted to visualize the structures in your body. This will help locate any possible changes accurately. Both scans will be performed simultaneously. A CT scan with contrast may also be conducted, where a contrast agent will be injected into your bloodstream through the same intravenous line. The contrast agent may cause a transient sensation of warmth and sometimes a metallic taste in your mouth. The contrast agent will be eliminated from your body in your urine.

The entire study will take approximately 3-4 hours, 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

You will be administered a small amount of radioactive material that radiates within you, therefore you should keep a certain distance to children and pregnant women for the next 24 hours. 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

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? _____