

Brain metabolic PET-CT

This examination is used to detect any metabolic abnormalities in different areas of the brain.

Please reserve approximately 2 hours for your visit.

If you are pregnant or suspect that you are pregnant, call the number listed in the arrival instructions. This examination is generally not carried out during pregnancy.

Preparation for examination

You need to follow all instructions for preparation. Failing to follow the instructions may lead to cancellation of the examination appointment.

Do not eat anything for 8 hours prior to your scan. Chewing gum and cough drops are prohibited as well. You may drink water.

You may take your prescribed oral medication with water.

Avoid exercise and physical activity prior to the scan.

Remove all jewellery and any clothes containing metal.

Diabetic patients:

You need to have blood tests taken before the examination (GFR and creatinine). Your attending physician will give you more detailed instructions.

Monitor your blood glucose levels regularly for at least 2 weeks before the PET-CT scan. If your glucose levels are elevated repeatedly,

please contact the unit responsible for your care.

Take any oral diabetes medication as usual.

Please note! Do not eat or inject insulin before the examination if you are on multiple-dose injection therapy and the examination takes place in the morning.

Follow the instructions below if the examination takes place in the afternoon.

If you use insulin injections, administer injections as follows:

- Rapid-acting or ultra-long-acting insulin injected in the morning (e.g. Apidra®, Humalog®, Novorapid®, Lantus®, Levemir®, Toujeo®, Tresiba®)
→ Have breakfast and inject insulin **4 hours** before the examination
- Short-acting insulin injected in the morning (e.g. Actrapid®, Insuman Rapid®)
→ Have breakfast and inject insulin **6 hours** before the examination
- Long-acting insulin injected in the morning (e.g. Protaphane®, Humulin®)
→ Please contact the examination unit (see the arrival instructions for the phone number)
- Insulin injected in the evening
→ As usual

Examination

At the beginning of the examination, you will rest for 1 to 2 hours at the ward. **You are not allowed to move, read or use your phone while resting.** An intravenous catheter (thin tube into a vein) will be placed into your arm, and a small amount of radioactive contrast agent will be given via the catheter. The contrast agent contains glucose.

The scan will begin about an hour later. During the scan, you will be lying down and you will need to remain still. The imaging takes approximately 30 minutes. The examination is painless.

The examination also includes a CT scan (computed tomography). The scans are performed simultaneously.

A CT scan with contrast agent may also be performed simultaneously. The contrast agent will be administered via the intravenous cannula. The contrast agent will cause a passing warm sensation and a metallic taste in the mouth. The contrast agent leaves your body with urine.

After the examination

After the examination, drink plenty of water and empty your bladder more frequently than you normally would. This is to make sure that the radioactive tracer leaves your body.

After receiving the radioactive contrast agent, do not hold a child or remain in prolonged close contact with children for the remainder of the day.

If you breastfeed, you must stop breastfeeding for 4 hours after the radioactive tracer is administered. The milk expressed during this period must be poured down the drain.

Other things to note

Please take your health insurance card (Kela card) or identity card with you.

Your attending physician will inform you of the test results. Please contact the unit responsible for your care if you do not already have a scheduled appointment or a phone consultation with your doctor.

You will not be charged for the examination separately. Cancel the appointment if you cannot come. If you do not cancel, you will be charged a fine.

Patient information form for PET scan

Please fill in the form the day before the examination and bring it with you.

Name: _____

Personal identity code: _____

Weight: _____ Height: _____

Have you ever had an allergic reaction to contrast material in any previous contrast-enhanced scans?

yes no

Have you had some surgery / endoscopic procedure / biopsy in the past six months?

yes no

Which one, when? _____

Do you have any foreign objects in your body (made of metal):

What objects: _____

Where: _____

Do you have, or have you had any of the following (check the box):

- diabetes tuberculosis
- heart attack intestinal infection
- kidney disease
- other inflammatory disease, please specify: _____
- other long-term illness, please specify: _____
- trauma (fractures, injuries), please specify: _____

Have you taken/received the following medicines in the past 2 weeks?

Cortisone yes no

Blood cell growth factor yes no

Cytotoxic/Cytostatic drugs yes no

If you have received cytostatic therapy or blood cell growth factor therapy within 2 weeks before the examination date, please contact the Nuclear Medicine Unit in Meilahti, tel. 09 471 72554.

Have you received radiation therapy in the past 3 months?

yes no

When? _____

On which area? _____

If you have received radiation therapy within 3 months before the examination date, please contact the Nuclear Medicine Unit in Meilahti, tel. 09 471 72554.

Do you have a scheduled appointment / telephone call with your doctor?

yes no

When is it? _____

Question for women:

Is it possible that you are pregnant?

yes no

If you suspect that you might be pregnant, please contact the unit responsible for your care before the examination.

Thank you for your answers.