Cerebral metabolic PET-MRI

The examination can determine if there are any signs of epilepsy sites, memory disorder, or malignant areas in the brain.

Please reserve approximately 4 hours for your visit.

Please familiarise yourself with the patient information form in advance. Bring the filled form with you to the appointment.

If you are pregnant or think you may be pregnant, call the number on the arrival instructions. This exam is generally not carried out on pregnant women.

Before the examination

Please follow the preparation instructions. Failing to follow the preparation instructions may lead to cancellation of the examination appointment.

Do not eat anything for 6 hours before the examination. Chewing gum and cough drops are prohibited as well. Drink plenty of fluids during the two hours before the scan, but no more than 1 liter.

You may take your oral prescribed medication with water.

For the scan, you must remove all jewellery and any clothes containing metal. Avoid physical strain on the examination day.

Diabetic patients:

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.

If the examination takes place in the morning and you are on multiple-dose injection therapy**,** do the following:

- Do not eat anything before the examination.
- Do not inject insulin before the examination.

If the examination takes place in the afternoon and you use insulin injections:

- 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

If you are using a transdermal patch, schedule its replacement for the examination day. Remove the old patch for the duration of the scan. Attach the new patch after the scan.

If you have an interstitial fluid glucose sensor, you must remove it before the scan. Bring a new sensor with you.

During the examination

You will change into hospital clothes before the scan.

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.

At the beginning of the examination, you will rest for 1 hour at the ward. **You are not allowed to move, read, or use your phone while resting.**

The scan will begin about an hour later. A radiographer will help you lie down in a comfortable position on the scanner's examination table.

For the images to succeed, you must remain completely still.

You will receive earplugs and hearing protectors because the scanner makes loud noise. You can listen to the radio if you wish.

The radiographer will be in the adjacent room during the scan. The radiographer will see and hear you throughout the examination.

A doctor will decide if you will be given a contrast agent injection. The contrast agent makes it easier to identify tissues in the images.

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.

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.

Other things to note

If you have claustrophobia, also known as fear of confined spaces, tell the staff about it when you register and that you need sedative medication.

If you know that you will need sedative medication, please arrive 30 minutes before your scheduled appointment.

The arrival instructions or the appointment letter contains our contact information if you have any questions about the examination.

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

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.

PET/MRIsafety questionnaire andpreliminary information form

The MRI safety questionnaire is specific to the PET-MRI examination,and it isfilled outeach time before the examination. Fill out this form carefully and bring it with you to the appointment.

Name _____

Personal identity code _____

Height _____ **cm** **Weight** _____ **kg**

Do you have any medical implants or other foreign objects in your body?

What kind of objects, Where:

_____

Do you have any of the following:	**Yes**	**No**
Transdermal patch (must be removed before the scan)		
Glucose sensor (must be removed before the scan)		
Hearing aid (must be removed before the scan)		
Claustrophobia		
If you answer "YES" to any of the items below, please contact the Meilahti Nuclear Medicine Unit tel. 040 632 5991.		
Are you allergic to the magnetic contrast agent (gadoteric acid)?		
Cardiac pacemaker or pacemaker leads		
Nerve stimulator or stimulator leads		
Clips or coils due to surgery or aneurysm		
Inner or middle ear implant		
Pharmaceutical pump		
Metal fragments, bullets, or shotgun pellets in the body		
Shunt in brain		
Breast tissue expander		
A medical implant installed outside of Finland		

Please keep in mind the following!

- Glucose sensor, medical patch, hearing aid and/or insulin pump must be removed before the scan. If the above are disposable, bring a new one.
- An artificial joint, an artificial heart valve, screws and plates in bones, sterilization clips, dental prosthesis or dental braces do not normally prevent conducting the examination but let the unit's staff know about them.
- Technical sportswear and medical compression garments may contain silver. They cannot be worn during the scan, and you must wear hospital clothes instead.
- Eye make-up is not allowed when scanning the area around the eyes.
- If you have an implant card, please bring it with you.

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

☐ yes ☐ no

Please specify what kind of procedure and when? _____

_____

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

☐ diabetes ☐ tuberculosis

☐ myocardial infarction ☐ bowel 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
Cytostatic drugs	☐ yes	☐ no

If you have received cytostatic therapy or blood cell growth factor therapy within 2 weeks of the examination date, please contact the Meilahti Nuclear Medicine Unit, tel. 040 632 5991.

Have you received radiation therapy in the past 3 months?

☐ yes ☐ no

When? _____ To which region? _____

If you have received radiation therapy within 3 months of the examination date, please contact the Meilahti Nuclear Medicine Unit, tel. 040 632 5991.

Question for women: Is it possible that you are pregnant?

□ yes □ no

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

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

☐ yes ☐ no

When? _____

Date and signature

_____

Thank you for your answers.