PET DIAGNOSTIK
BERN

FDG PET/CT
Brain

www.petdiagnostik.ch

Dear Patient,

On behalf of the PET Diagnostik Bern AG, we would like to welcome you to the Inselspital, Bern University Hospital.

You have been referred to the Department of Nuclear Medicine for an outpatient nuclear medical procedure. This information leaflet contains further details on the examination procedure.

General Information

Nuclear medicine involves the use of low-level radioactive substances to diagnose and treat various diseases. These substances are usually injected into a vein and transported via the blood stream to the respective organs or their cells. Using PET/CT scanners, the distribution of the radioactive substances in the body can be examined and pathological changes can be visualized precisely.

Purpose of the examination

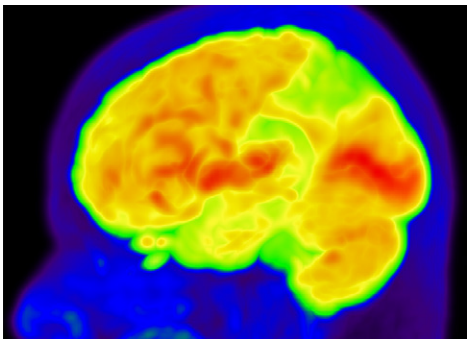
The PET/CT examination serves to detect or evaluate various diseases (e.g. cancer, inflammation, heart muscle damage or brain disorders) and involves two examinations, PET and CT, which are performed simultaneously.

A FDG-PET/CT of the brain is performed to examine the metabolic performance of nerve cells. Certain diseases of the brain, such as dementia, can lead to changes in the glucose metabolism in nerve cells in characteristic brain regions. Following the injection of a radioactive glucose solution (FDG) into the bloodstream, a PET scan is used to determine the uptake of the radioactive glucose molecules into the nerve cells, which indicates their metabolic activity.

Preparation for the examination

It is essential that you fast for at least 6 hours before the FDG-PET/CT examination.
You can drink water and take your medication as normal.

If you are a diabetic, you can take your diabetes tablets according to your usual schedule. Patients with long-acting and short-acting insulin should



take their injections as normal on the day before the appointment. On the morning of the examination, 4 hours before the procedure, you may eat a small breakfast and inject short-acting insulin.

If you suffer from claustrophobia, we can provide you with a sedative to help you relax prior to the PET/CT scan. Please ask us about this once you arrive at the clinic. After taking this medication, you should not drive a car for the rest of the day. Ideally, you should have someone accompanying you who can pick you up after the examination.

Where does the examination take place?

On the date of your appointment, you should come to the Department of Nuclear Medicine in the building INO, Level B of the Inselspital:

PET Diagnostik Bern AG
c/o Department of Nuclear Medicine
Inselspital, Bern University Hospital
Entrance 33, INO Level B

To get to the Department of Nuclear Medicine, please enter the Inselspital through the main entrance (Entrance 33). From there, follow the red line from the main entrance to the elevators (red dot No. 5). Take the elevator to Level B and then continue to follow the red line to the red dot No. 8. Please register at the reception at the Department of Nuclear Medicine. Please bring your health insurance card with you to the appointment.

Examination procedure

Following your arrival at the clinic and an initial discussion with our specialist staff, you will be asked to rest for approximately 30 minutes, after which the radioactive glucose solution will be administered via an intravenous injection in your arm. You will then need to rest for a further 30 minutes before the examination begins. You will be provided with an eye mask to minimise visual input during this time.

At the beginning of the examination, you will be positioned as comfortably as possible on the examination table. The examination will take approximately 15 minutes. In order to obtain the best quality images, you will need to remain still during the procedure.

An intercom allows you to communicate with our staff at any time during the scan.

Risks and side effects

There are no known side effects from the substances used for PET examination. No allergic reactions are to be expected.

Exposure to radiation

The radiation exposure from the PET/CT examination is approximately equivalent to the annual natural exposure to radiation in Switzerland.

After the examination

- On the day of the examination you should avoid prolonged close contact with children under 16 years of age and pregnant women for a 12-hour period.
- Drinking plenty of fluids and frequent urination helps to flush the radioactive substances out of your body and reduce the exposure to radiation.
- Breastfeeding women should refrain from breastfeeding for 24 hours.
- Following the examination, you can carry out all further activities without any restrictions.

Contact

If you have any further questions, please do not hesitate to contact us at 031 632 24 24. Additional information is also available on our website at **www.petdiagnostik.ch.**

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Please note the following:

The radioactive tracer is prepared individually for each patient in advance. If you need to cancel your appointment, please inform us no later than the morning of the preceding day (031 632 24 24). Failing this, we reserve the right to invoice you for the costs incurred (approx. CHF 500.–).

As some time is needed for the assessment and interpretation of the images, we are unable to provide you with the results immediately after the examination. The examination report and the images will be sent to your referring physician.