



Information on the examination

Purpose of the investigation

The PET/CT examination provides confirmation, clarification or exclusion of illnesses (such as inflammation, cancer, heart muscle damage or brain disorder).

PET (Positron Emission Tomography) enables extremely sensitive detection of pathological changes and their localisation.

Here the characteristic metabolic changes and cell characteristics for the illness in question are utilised and detected by the PET. This, together with the simultaneously recorded CT (Computer Tomography), enables changes to be pin-pointed precisely in the body and assigned to particular organs for example.

When searching for cancer cells, in the majority of cancer types, a small quantity of weakly radioactive glucose solution (FDG) is administered into the metabolism like natural glucose. Cancer cells generally use a lot of glucose. This enables them to be identified and to locate tumours in the body. With some cancers, other substances are used and tumour sites specifically identified via different routes, e.g. with prostate cancer (choline) or neuroendocrine tumours (DOTATATE).

Radiation exposure

The radiation exposure as a result of the nuclear medicine examination is equivalent to around 2-3 times the natural annual exposure to radiation in Switzerland.

Behaviour after treatment:

- On the day of the examination, you should avoid extended close contact with small children and pregnant women.
- If you drink plenty of liquid and pass water frequently, this promotes flushing out of the substance and reduces the radiation exposure.
- Breastfeeding women should refrain from breastfeeding for 24 hours.
- After the examination, you may pursue all your normal activities without restriction.

Contact

If you have any further questions or require information, please do not hesitate to call us on **031 632 24 24**. You can find more information at www.petdiagnostik.ch.

Please note

The radioactive tracer is made up individually in advance for each patient. If you are obliged to cancel the agreed examination appointment, please inform us no later than the morning of the preceding day (Tel. 031 632 24 24). Should you fail to do so, we reserve the right to charge you the costs incurred (ca. CHF 500.-).

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Positron Emission Tomography Computer Tomography (PET/CT)

PET Diagnostik Bern AG

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PET
Diagnostik Bern AG



Dear Patient

On behalf of PET Diagnostik Bern AG, we would like to welcome you to the Inselspital Bern. We have made an appointment for you in the Department of Nuclear Medicine for a PET/CT examination. This information letter tells you about the examination procedure.

General information

Nuclear medicine involves the use of radioactive substances to diagnose and treat various illnesses. These substances are generally introduced into the bloodstream from where they are transported to the tissue concerned. The distribution of the radioactive substances in the body can be tracked with the aid of PET/CT scanners.

Information on registration

You have been referred to us by your doctor. Please come at the agreed examination appointment time in the Department of Nuclear Medicine, building INO floor B of the Inselspital.

Location for the investigation

PET Diagnostik Bern AG
c/o Department of Nuclear Medicine, Inselspital
Entrance 33, INO floor B,
Tel. 031 632 24 24, Fax 031 632 17 54

To get to the Department of Nuclear Medicine, please enter the Inselspital through the main entrance (Entrance 33). It is not necessary to register at the main reception for the PET/CT examination. Follow the red line from the main reception to the lifts (red dot No. 5). In the lift, select floor B and then continue following the red line to the red point No. 8. Register there at the Department of Nuclear Medicine reception. Please bring your new Swiss health insurance card with chip.

Preparation

The most commonly performed examination is the glucose metabolism PET/CT with radioactively labelled glucose (FDG). It is absolutely essential that you refrain from eating before the FDG-PET/CT (at least 6 hours, 12 hours in the case of a heart examination, or in accordance with specific instructions).

You may drink water and take your medicines.

If you suffer from claustrophobia, you can take a sedative before the images are taken. In this case, however, you are not permitted to drive for the rest of the day.

For PET/CT examinations with medications other than FDG, no special preparation is necessary.

Examination procedure

The weakly radioactive substance required for the examination is injected into a vein in the arm. The substances used require a certain time to reach their target. Only then can the images be recorded. You will wait comfortably in a reclining chair. You are welcome to bring a portable music player to pass the time.

Reading and other activities are not permitted during the waiting time before the FDG PET/CT in order to prevent an undesirable increase in absorption of the sugar solution into the musculature, resulting in a reduced image quality.

The preparation and the procedure may differ, depending on the problem and the substance used. Below you will find an overview of the procedures for common examinations. You will in any case be informed individually by our staff when receiving the notification and on the examination day regarding the preparation and procedure for the PET/CT examination.

Tumour

Waiting time: For examination with FDG, ca. 90 minutes, with other substances 0-40 minutes

Examination time in the scanner: 15-50 minutes

Inflammation

Waiting time: ca. 45 minutes

Examination time in the scanner: 15-30 minutes

Brain

Waiting time: ca. 30 minutes

During the waiting time in a quiet, darkened environment, it is necessary to relax completely and keep your eyes shut in order to reduce brain activity to a minimum.

Examination time in the scanner: ca. 20 minutes

Heart

Preparation: 60-120 minutes

A special preparation is carried out to ensure that the injected medicament concentrates as desired in the heart muscle.

Examination time in the scanner: 30 minutes

For the examination, you will be kept as comfortable as possible on the mobile scanning table. The necessary settings and markings will be carried out.

During the examination, the scanning table will move a number of times. You must not move at any time on the scanner, otherwise the PET and CT images will not coincide and may possibly be unusable.

Risks and side-effects

The substances used for the PET/CT have no known side-effects. No allergic reactions are to be expected. The examination can also be carried out on children.