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NUKLEARMEDIZIN

Adrenal Medulla Scintigraphy

Dear Patient

On behalf of our hospital and clinic management team, we would like to welcome you to the Inselspital Bern. You have been referred to the Department of Nuclear Medicine for an outpatient nuclear medicine procedure. This information leaflet contains further details on the examination preparation and procedure.

General information

Nuclear medicine involves the use of radioactive substances to conduct functional and localization diagnostics for organs, tissues and systems, and treatment using open radionuclides. Radioactive tracers are used to visualise metabolic processes which enables the diagnosis of organ dysfunction without the need for invasive procedures. Camera systems allow the function of organs or body systems to be assessed externally.

Registering for your appointment

- Please bring your Swiss health insurance card with you to your appointment.
- To register your data in the Insel system, please go to the Information Desk/ Patient Reception at the main entrance half an hour before your appointment. You will be given a number there. Once this number is called out, you will be told which cabin to go to for admission.
- Alternatively, you can register using our convenient online Patient Check-In via the Inselspital's homepage up to 48 hours before your examination appointment: www.insel.ch/check-in
- The examination will take place in the INO building, Level B. From the main entrance, follow the red dotted line on the floor to Waypoint 5. Take the elevator to Level B and then continue to follow the red dotted line to Waypoint 8 (Reception, Department of Nuclear Medicine).

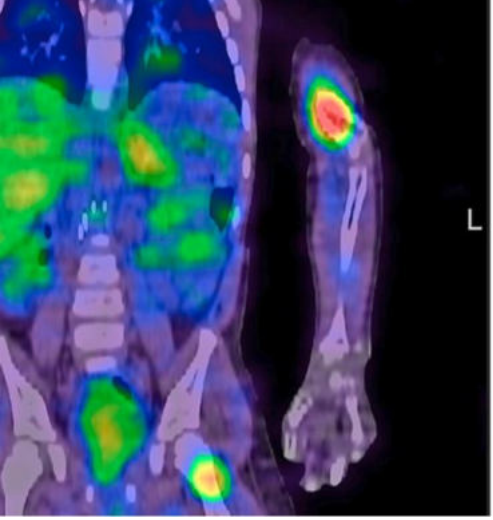
Where does the examination take place?

Department of Nuclear Medicine
INO B, North
CH-3010 Bern
Tel.: 031 632 24 54, Fax: 031 632 31 37

Information on the procedure

Purpose of the examination
Detection and localization of a tumour of the adrenal medulla (pheochromocytoma). Localization/detection of tumours or metastases in carcinoid medullary carcinoma of the thyroid and paediatric neuroblastoma.

Examination procedure
A small amount of a radioactive substance (I-123 MIBG) will be injected into a vein in your arm. You will be given a drug 30 minutes prior to the injection (Irenat, see Preparation for the examination) to prevent this substance from accumulating



unnecessarily in the thyroid or the stomach. At 6 hours and 24 hours after administration of the injection, full-body and partial-body images will be taken. Where required, the examination can be supplemented by computer tomography (CT), which shines an X-ray beam through the body to produce an "anatomical map". A combination of both examinations (known as SPECT/CT examination) allows a more precise assessment of the nuclear medicine findings.

The examination takes up to 2 hours for each scan.

Please note

Following the injection and between the scans, patients are free to leave the clinic and go about their daily activities.

The radioactive medication is excreted via the kidneys and the bowel. It is therefore advisable to drink plenty of fluids and to empty the bladder and bowel as often as possible to minimize exposure to radiation.

Preparation for the examination

Administration of thyroid blockade with Irenat drops 30 minutes before the examination until 3 days after the injection. As various medications can influence the results of the examination, you or your general practitioner should consult your nuclear medicine specialist as to whether any medication needs to be stopped before the procedure.

Risks and side effects

Allergic reactions are uncommon when administering radiopharmaceuticals, as only minimal amounts of the substance are used. If I-123 MIBG is injected slowly, other possible side effects such as vomiting, rapid heartbeat and abdominal pain are also very rare.

Exposure to radiation

The radiation exposure by the MIBG scintigraphy is in the range of the annual natural radiation exposure. In children, the amount of substance administered is adjusted to minimize radiation exposure.

After the examination

- On the day of the examination you should avoid prolonged close contact with children under 16 and pregnant women. A distance of 1m is sufficient.
- Drinking plenty of fluids and frequently urinating helps to flush the radioactive substances out of your body and reduce the exposure to radiation.
- Breastfeeding women must stop breastfeeding completely after this examination.

Please note the following

If you need to cancel your appointment, please call to inform us (031 632 24 54) by 12:00 three working days prior to your scheduled examination at the latest. Failing this, we reserve the right to invoice you for the costs of ordering the radioactive substance to the amount of CHF 1'000.

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www.nukmed.insel.ch