

## PET/CT IMAGING WITH 18F-SODIUM FLUORIDE

Positron emission tomography (PET) is an imaging technique used to evaluate the metabolic processes in the tissues and lesions of the human body. A small amount of radiolabelled substance involved in metabolism will be injected into the patient's body to obtain an image. In the present case, it is a radioactive fluorine-labelled bone-specific substance.

At the same time, computed tomography (CT) will be performed. The anatomical image obtained will be combined with the PET image and, if necessary, a contrast agent containing iodine will be injected into the patient's vein.

**The test is used** to detect pathological changes in the bones.

### **Inform medical staff about conditions that need special attention:**

- allergy (e.g. to contrast agent etc.);
- claustrophobia (fear of small or closed spaces);
- pregnancy; breastfeeding: you will receive guidance when to resume breastfeeding;
- you are unable to lie still.

### **Preparation for the test:**

- there are no dietary or lifestyle restrictions associated with the procedure. Drink more fluids than usual;
- on the day of test, take your medications as prescribed by the treating physician.

### **The procedure**

The duration of the procedure, including preparation, is about 2.5–3 hours. Before the test, a nurse will speak to you, insert an intravenous cannula and inject a radioactive tracer. After the tracer has been injected, you should wait 40–60 minutes until it has accumulated in possible lesions. After that, a PET/CT scan will be performed, which lasts up to 60 minutes. During the test, you will be asked to lie still to ensure a high-quality result.

### **After the study:**

- follow your normal diet and drink plenty of fluids to foster removal of excessive tracer from the body;
- breastfeeding should usually be discontinued for 24 hours; removed breast milk should be discarded. Detailed instructions will be given to you by the personnel in the department;
- on the study day try to avoid close (less than 1 metre) and long lasting (over quarter an hour) contact with children and pregnant women;
- study results will be sent to referring physician within a week. If you have a doctor's appointment on the same day or the following day, please inform the study personnel.

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