

# Magnetic resonance imaging

The purpose of this information leaflet is to give you information on magnetic resonance imaging (MRI), how to prepare for it, what can interfere with it, what happens during the procedure and where you can find additional information.

## **What is an MRI?**

An MRI is a diagnostic examination that uses a strong magnetic field to obtain an image of the human body. The examination is painless, does not require any special preparation from the patient and allows the diagnosis of several diseases. An MRI does not involve the use of ionising radiation or X-rays. The procedure is only performed for specific medical indications with a doctor's referral.

## **Preparation for the procedure**

Please arrive at the Centre of Radiology reception 15 minutes before the procedure.

## **Before the procedure, you will be asked to fill in a questionnaire.**

- A strong magnetic field is used for the procedure, so no metal objects or mechanical devices may be taken into the examination room. These may pose a risk to yourself, the staff and the equipment.
- When you come to the examination, please wear something light and, if possible, leave jewellery, watches, dentures, glasses, etc. at home as you will be asked to remove them for the procedure. You can leave your personal items in a locker in the changing room.
- If necessary, you will be provided with suitable clothing to change into.
- Do not use hair spray or cosmetics (e.g. eye shadows, lipsticks and body lotions containing mother-of-pearl) on the day of the examination.
- You can continue taking your daily medications and there are no restrictions on your diet, unless your doctor tells you otherwise.
- If you have claustrophobia, i.e. a fear of confined spaces or anxiety, talk to your doctor, who will prescribe a mild sedative if needed so that the procedure can be performed. If you are afraid, also inform the radiology technician performing the procedure.

## **The following foreign objects in or on your body may interfere with the MRI and compromise your safety during the examination:**

- a pacemaker (with the exception of an MRI-resistant cardiac pacemaker programmed to a special mode with a specific device for the time spent in the examination room and during the procedure);
- a brain aneurysm clip;

- a neuronal transmitter;
- joint prostheses, screws, fracture fixation plates;
- prostheses;
- an artificial heart valve;
- metal fragments;
- stents, clips;
- braces, orthodontic wires.

If possible, take your implant card with you.

If you have metal implants or foreign objects in your body, please inform the radiology technician performing the procedure before entering the examination room. In most cases, it is safe for you to have the procedure with metal implants, except for a few contraindications.

If you are or suspect you might be pregnant, inform your doctor and the radiology technician performing the examination. Although no evidence of foetal damage has been found so far, this method of examination is used during pregnancy only in severe or life-threatening cases, and the contrast agent is injected only in the case of a vital indication.

### **During the procedure**

- The examination takes 15-90 minutes depending on the purpose of the procedure and the area to be examined.
- Typically, you will be lying on your back on the examination table and the radiology technician will slide the table into the centre of the MRI machine, which is a ventilated and illuminated tunnel open at both ends. You must lie still during the examination. You will hear hammering and banging noises that can last from a few seconds up to several minutes. You will be given headphones and earplugs to reduce the noise.
- Many diseases can be diagnosed with an MRI using a contrast agent. If your examination requires a contrast agent, the radiology technician will place a venous cannula.

The MRI contrast agent contains gadolinium and not iodine, and is therefore well tolerated. Allergic reactions are very rare. If you are injected with a contrast agent, it is recommended that you drink more fluids than usual after the examination to allow the contrast agent to leave your body faster.

- During the examination, you will be monitored through a window and via a camera. If you experience any discomfort, you can use the safety button to alert the radiology technician.

You may get dressed and leave right after the procedure.

You will find out the result of the examination from your doctor.

Examinations are carried out at the A-corpus (Ravi 18) and at the Magdaleena X-corpus (Asula põik 5) in East Tallinn Central Hospital. If you can't make your appointment, please contact the Centre of Radiology reception at the telephone number 620 7200 (Ravi 18) or 666 5130 (Asula põik 5).

### **Additional information**

If you have any questions about the examination, you can get information from the radiological examinations helpline. The helpline cannot register you for an examination or provide information about the results of your examination.

You can reach the helpline from 8 a.m. to 4 p.m. Monday to Friday.

- telephone: [666 5166](tel:6665166)
- e-mail: radioloogiainfo [at] itk.ee

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Approved by the decision of the Care Quality Commission of East Tallinn Central Hospital on 10.01.2024 (protocol no. 1-24)