

## Magnetic Resonance Imaging (MRI) of the head, neck, spine, limbs, chest, joints, or blood vessels

Due to the preparations needed for the examination, we ask you to **arrive 15 minutes before the appointment time**. The examination takes around 30-60 minutes.

### Before the examination

- You can eat and drink as usual and take your daily medications.
- Do not apply any medicated patches (e.g. nicotine patch, analgesic patch).
- All jewelry and piercings must be removed before the examination. If you have piercings that you do not wish to remove, please replace them with plastic ones that contain no metal parts.
- Eye makeup should not be applied before an examination of the head area.
- Wear something light and comfortable that is easy to put on and remove.

### During the examination

Magnetic resonance imaging (MRI) allows us to obtain accurate anatomical images of the human body using a strong magnetic field. No ionising radiation or X-rays are used for the examination. The examination is painless and enables the diagnosis of several diseases. The examination is performed in a tunnel-like device, which is an open, ventilated and illuminated room at both ends.

**Please note!** If you have claustrophobia or a fear of confined spaces, 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 radiographer performing the procedure.

During the examination, you will be monitored through a window and via a camera and in the case of discomfort, you can let the radiology technician know by pressing the safety button.

**For the examination to be successful, you are required to keep still throughout the examination.** To this end, we try to position you as comfortably as possible. If necessary for the examination, you may be given breathing instructions. The moments where you need to hold your breath last around 10 to 20 seconds at a time.

Since the MRI device produces loud noises throughout the examination, you will be given ear protection.



During some MRI scans, a contrast agent may be injected into a vein to improve the clarity of the images. The contrast contains gadolinium. Allergic reactions are very rare.

### MRI contrast agent – what should you know?

The contrast agent used in MRI contains gadolinium, which helps the doctor see important areas more clearly. Modern gadolinium-based agents have very low kidney toxicity and are generally safe to use.

#### Patients with kidney problems

- Contrast agents can be administered even to patients with kidney failure, including those with significantly reduced kidney function (eGFR < 30).
- If the eGFR is very low (< 15), hemodialysis after the examination may be helpful.
- MRI with contrast can be performed for hemodialysis patients if dialysis is carried out within 24 hours after the examination.
- Patients on peritoneal dialysis can continue their treatment as usual.

Gadolinium may accumulate in certain areas of the brain over time, but the clinical significance of this is currently unknown.

**Low-risk MRI contrast agents include:** Gadovist.

The contrast agent is excreted from the body through the kidneys; it is recommended to drink more fluids than usual after the examination.

#### Pregnancy and breastfeeding

- **During pregnancy**, gadolinium contrast is used only if absolutely necessary.
- Only a very small amount of contrast agent passes into breast milk, and it is completely cleared from the body within 24 hours. If desired, a mother may pump and store breast milk before the examination to use for feeding afterwards. This is not required, but it may provide additional reassurance.

### After the examination

You will receive the results of the examination from your doctor. If you do not have a scheduled follow-up appointment or phone call, please contact the referring department.