

MRI Checklist for MED-EL Middle Ear Implant VORP 503

If the conditions or instructions herein are NOT followed, **INJURY** to the patient and/or **DAMAGE** to the implant may result!

→ **VALID** for all body regions

In case of additional implants, e.g. a hearing implant in the other ear: MRI safety guidelines for this implant need to be considered in addition.



The external components of the MED-EL Implant System (audio processor and accessories) are MR Unsafe and need to be removed prior to scanning.



The implant components of the MED-EL Implant System are MR Conditional.



GENERAL CONDITIONS

→ **PERMITTED**, static magnetic field strength

1.5 T

→ **MAXIMUM PERMITTED SAR** (at 1.5T)

NORMAL OPERATING MODE

3.2 W/kg (Head), 2.0 W/kg (Whole-Body)

PREPARATION

- **USER IDENTIFICATION CARD**

Ask patient for User Identification Card to check implant type.

OK

- **IMAGE ARTEFACT**

Is accurate diagnostic possible even with the expected image artefact (13–14 cm around the implant)?

YES → continue (next bullet point)

NO → consider MARS sequences, alternative imaging technologies

- **AUDITORY SENSATIONS**

Inform the patient about possible auditory sensations during the examination.

NOTE: The likelihood and intensity of auditory sensations can be reduced by selecting sequences with a lower Specific Absorption Rate (SAR) and slower gradient slew rates. May also be reduced by putting on noise protection headphones.

OK

- **HEAD ORIENTATION**

Inform the patient not to turn her/his head.

OK

- **EXTERNAL COMPONENTS**

Remove audio processor and accessories before entering the scanner room.

OK

- **OPTIONAL: HEAD BANDAGE**

A head bandage over the implant is not needed.

OK

EXECUTION

- **PATIENT POSITIONING**

Ensure straight head orientation.

NOTE: When lower extremities are to be examined, it is recommended that patient's legs are positioned in the scanner first.

OK

- **OPERATING MODE**

Run sequences in "Normal Operating Mode" only.

NOTE: Max. 3.2 W/kg for Head scans, 2.0 W/kg for Whole-Body scans

OK

- **ACCESSORIES**

Do not utilise head transmit coils or multi-channel transmit coils

OK

Please also refer to the webpage www.medel.com/isi-VORP-503

Help and assistance are always available from your local office. Please visit us at www.medel.com.

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