VIBRANT SOUNDBRIDGE Middle Ear Implant Case Study: Prof. Dr. Robert Mlynski

The MED-EL Surgical Video Library offers complete surgical case studies from leading ENT surgeons. Created in cooperation with ARRI, these ultra-high-resolution videos capture precise movements and detailed structures with incredible clarity. Access is free and the easy-to-use library is optimized for desktop or mobile viewing.

Today, we have an excellent VIBRANT SOUNDBRIDGE Middle Ear Implant surgical case study to share. This video case study is part of our MED-EL Surgical Video Library, so it's presented in ultra-high definition. With 4K resolution, you'll have a clear view of surgical techniques and anatomical structures, including the posterior tympanotomy, exposure of the incus body, and attaching the Incus-SP-Coupler to the body and short process of the incus.

VIBRANT SOUNDBRIDGE Surgical Case Study

In this case study, Prof. Dr. Robert Mlynski demonstrates his surgical technique for right side implantation with the VIBRANT SOUNDBRIDGE VORP 503 Middle Ear Implant. Prof. Mlynski is the head of the ENT Department, Head and Neck Surgery, of the Otto Körner Clinic at the Rostock University Medical Center.

In this case, the 50-year-old female patient has bilateral congenital sensorineural hearing loss. This patient has already been using a VIBRANT SOUNDBRIDGE in her left ear since 2001, which she continues to benefit from.
The pre-operative audiogram shows this patient has bilateral high-frequency sensorineural hearing loss.

As you can see from the audiogram, this patient has bilateral high-frequency hearing loss. Her hearing loss slopes from a mild hearing loss in the low frequencies to severe hearing loss in the high frequencies.

This patient could potentially be a candidate for EAS, but she has chronic otitis externa, which precludes the use of a hearing aid or acoustic element in her ear canal. As this patient was benefiting from her contralateral VIBRANT SOUNDBRIDGE, Prof. Mlynski chooses to also use a VSB for her right ear.

- Adult female, 50 years, right ear
- Bilateral high-frequency sensorineural hearing loss
- Chronic otitis externa
- VIBRANT SOUNDBRIDGE Middle Ear Implant
- FMT attached to short incus process
VIBRANT SOUNDBRIDGE VORP 503 Middle Ear Implant and SAMBA Audio Processor with magnified FMT and Vibroplasty couplers.

VIBRANT SOUNDBRIDGE is an ideal treatment option for mild-to-severe sensorineural hearing loss, as well as conductive and mixed hearing loss. It uses a Floating Mass Transducer (FMT) to directly stimulate middle ear structures with amplified sound vibrations. Depending on the hearing loss the FMT is attached to different structures of the middle ear using specialized Vibroplasty couplers.
The Incus-SP-Coupler attaches the FMT to the body and short process of the incus, allowing simple connection through a posterior epitympanotomy. A posterior tympanotomy is not necessary, allowing surgeons to avoid the facial nerve and chorda tympani.
Watch now: Prof. Dr. Robert Mlynski demonstrates his VIBRANT SOUNDBRIDGE surgical techniques in this ultra HD video middle ear implant case study. (13 minutes)

Highlights to watch for in this middle ear implant surgical case study:

- Patient overview, including pre-op audiogram and CT
- Incision and creation of sub-periosteal pocket
- Usage of the Coil-Sizer (VSB implant template)
- Creating a shallow implant bed
- Performing a posterior epitympanotomy
- Exposing ossicular chain & confirming mobility
- Using FMT-Sizer to check FMT placement
- Drilling channel for VSB conductor link
- Attaching the FMT to the Incus-SP-Coupler
- Fixation of VSB with self-drilling screws
- Positioning FMT-Coupler assembly on incus short process

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