Hearing (re)habilitation
Cochlear Implant and Bone Conduction Implant (Baha®)

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How a cochlear implant works

A sound processor (1) captures sound and turns it into digital code. The coil (2) transmits the sound to the implant (3). The implant converts the digitally-coded sound into electrical impulses and sends them along the electrodes placed in the inner ear (4).

When to refer a patient for CI assessment:
Patients should be referred when displaying a bilateral moderate to profound sensory neural hearing loss and receive little or no benefit from hearing aids.
Patients with a mild to moderate hearing loss in the low frequency region and profound hearing loss in the high frequencies, who do not receive much benefit from hearing aids may be a candidate for combined acoustic-electric stimulation.

How Baha works

A sound processor (1) captures sounds and converts them into vibrations. A connecting abutment (2) transfers the sound vibrations from the sound processor to the titanium implant. The implant is placed in the bone behind the ear where it fuses with the bone to form a very strong bond. The implant transfers the sound vibrations through the bone directly to the cochlea (3), bypassing the outer or middle ear completely.

When to refer for Baha assessment:
• Anatomic malformation of external and/or middle ear.
• Chronic middle ear conditions that preclude usage of conventional hearing aids.
• Unilateral deafness.

The benefits of Baha include lack of occlusion of the ear canal, comfort and a natural sound. Baha candidates also have an opportunity to trial the sound processor on a headband before surgery.