The cochlear implant process is a long and complex journey. Although public awareness of cochlear implants is increasing, certain misconceptions and myths persist. As a result, many parents and individuals considering a cochlear implant have questions and preconceived notions about the procedure. In the third of a three-part series exploring the cochlear implant process, this final installment dispels common myths about the cochlear implant.

**MYTH** – Cochlear implants require brain surgery.

**TRUTH** – The human body has significant structures that protect the brain and these are not threatened by the cochlear implant procedure. The surgical procedure required is based on standard techniques that have been used for inner ear surgery for decades. The surgery is actually performed on the mastoid bone, which is the strong, bony area right behind the ear. The most unique elements of cochlear implantation are the creation of a small “bed” or indentation in the mastoid bone and the insertion of the electrode array into the cochlea.

**MYTH** – Children who have cochlear implants cannot swim or participate in sports.

**TRUTH** – Children respond differently to the sounds of music, some better than others. If your child is musically inclined, the speech processor will enable his or her interests and skills; many children with cochlear implants learn to play musical instruments.

**MYTH** – Cochlear implants don’t provide good sound quality. Most people can only hear beeps and buzzes or speech that sounds like a robot.

**TRUTH** – This myth probably exists because it can be difficult to understand the sounds provided by a cochlear implant during the initial period of use. Perhaps there were some users who did not allow enough time to become accustomed to the sound and stopped using their speech processor. For others, however, the experience of listening with a cochlear implant improves over time and with listening practice. In the case of children who are developing spoken language with the help of a cochlear implant, be assured they are not hearing beeps and buzzes by listening to their own speech production. If they were hearing beeps and buzzes, they would be saying, “beeps and buzzes!”

**MYTH** – Children with cochlear implants cannot appreciate music.

**MYTH** – Children with cochlear implants cannot have a magnetic resonance image (MRI).

**TRUTH** – Different procedures affect technology in a variety of ways. Currently, only the MED-EL cochlear implant can withstand 0.2 Tesla strength MRI machines without removing the magnet from the internal device. Recent devices from Advanced Bionics Corporation and Cochlear Corporation allow for MRI procedures once the internal magnet has been removed with a
simple surgical procedure. Families and physicians must consult with their cochlear implant manufacturer or cochlear implant medical team prior to scheduling any MRI procedure. It should be noted that other tests may be done as a substitute for an MRI, so parents should alert the doctor of the child’s cochlear implant and determine the most appropriate diagnostic procedure.

For further information about the cochlear implant process and the other devices available, please visit the following websites: the FDA Cochlear Implant Web site at www.fda.gov/cdrh/cochlear; MED-EL Corporation at www.medel.com; Advanced Bionics Corporation at www.bionicear.com; and Cochlear Corporation at www.cochlear.com.

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