

Cochlear Implants for Young Children

The issue of whether to give a child a cochlear implant brings up questions of more than just a medical nature. The Deaf Community has serious concerns about the procedure and its effect on their way of life. Will receiving the implant make the child “Hearing” and therefore remove them from the Deaf Community? Can the child in question bridge the Hearing Community and the Deaf Community? The parent faces a hard decision with differing opinions from doctors, people in the Hearing Community, and people in the Deaf Community. If parents will allow their child to receive a cochlear implant at a young age and teach them sign language as well, this child can grow up to have the best of both worlds in the Hearing and Deaf Communities.

The cochlear implant is available to persons classified as severely or profoundly Deaf. It is a “surgically implanted device that is capable of restoring hearing and speech understanding” (Tucker 6). Surgical candidates “receive auditory information and stimulus by bypassing the defective hair cells in the ear and directly triggering the auditory nerve” (Malek 34). The device was developed in the 1970s and surgeons began implanting adults starting in 1984. The device was approved for children over the age of 2 in 1990 (Malek 34). Author Alia Malek describes the device further:

The implant consists of eight electrodes and a decoder. A surgeon implants the electrodes into the cochlea of one ear and the decoder in the bone behind the ear. On the ear a patient wears a tiny microphone that fits along the upper rim, to which the portable speech processor is attached by wire. The microphone is also wired to a transmitter, worn externally, that is magnetically attached to the implant. Three to four weeks after surgery, audiologists activate the implant in a process that

involves programming the maximum and minimum volume settings for each of the electrodes (34).

Hopkins otolaryngologist John Niparko, a specialist in the disorders of the ear or nose or throat, says new patients “needed follow-up rehabilitation after surgery to make the transition to the hearing world” (Malek 34). In this weekly two-hour session, Audiologist Mary Koch works with a 4-year-old girl, Melissa, with a new implant. The audiologist covers her mouth and makes a sound that the little girl must repeat. Koch starts with the sound “meow,” but the little girl takes it to the next level and signs “cat” in American Sign Language. Melissa already has a small vocabulary through sign language, making the rehabilitation sessions easier for all involved. Koch says, “Some of the center’s children come without any language ability”(Malek 34). Melissa’s foundational language skills in ASL aid in her current acquisition of spoken language through her implant.

American Sign Language (ASL) is the cornerstone of the Deaf Culture. 1 million to 2 million people use ASL as their first language. ASL is a language of its own, not just one sign per each English word. ASL is “visual rather than spoken, with its own syntax and grammar” (Tucker 7). The Deaf Community sees themselves as “members of a vibrant culture, with its own history, humor, and art, not victims of a disorder” (Tolson 58). Since they do not consider themselves disabled, cochlear implants are opposed by many in the Deaf Culture. They feel the “efforts to ‘cure’ deafness ... means killing Deaf Culture. Deaf people like being Deaf, want to be Deaf, and are proud of their Deafness” (Tucker 7).

People in the Hearing Culture who have not grown up Deaf may not understand why people in the Deaf Community feel this way. The natural response is to wonder why they would refuse themselves or their children the opportunity to hear. Bonnie Tucker, a member of the Deaf Community, says, “Many members of the Deaf Cultural Community strongly desire to have Deaf children, who will be a part of their parents’ Deaf culture” (7). If a Hearing couple adopts a baby from China, they may allow their child to be exposed to Chinese culture in a small way. For the most part, this adopted child will become integrated into the American culture. We all desire for our children to be able to communicate with us and share every aspect of our lives.

Is it possible for a child to communicate with both ASL and English, therefore bringing the Hearing and Deaf worlds together? Since ASL is technically a foreign language, any child who learns both ASL and English will become bilingual. Many people who desire to bridge this gap propose “that once a child who is Deaf has acquired a strong ‘natural’ language (ASL), the child can then be taught written ... English as a second language” (Tucker 8). Moise Goldstein, emeritus professor of electrical and computer engineering at Johns Hopkins, believes “Deaf children should learn sign language (ASL) as their first language, and English as their second.” He goes on to explain that Deaf children have a superior visual channel in their brain that allows them to learn a visual language such as ASL equal to other children learning English (Malek 35).

Another question that needs to be asked is whether the parents or the children should decide if a cochlear implant is appropriate for that individual child. Those that believe the parents should choose the cochlear implant surgery for their young child can

look to a recent study that shows that “infants who don’t start developing language by the sixth month suffer permanent cognitive deficits” (Tolson 58). Letting the child decide when they are old enough is the point of view of many in the Deaf Culture (Tucker 8). It can be argued that if an individual waits until they are of an age mature enough to decide this for themselves many of the benefits of the surgery will have expired.

Medically, the list of pros is growing. It may take time to see the full results of the implant. Research from Santarelli, De Filippi, Genovese, and Arslan shows word and sentence recognition continues to increase even at 3 years after the cochlear implant (257). Bonnie Tucker reminds us that the “technology is improving rapidly” (9), and “most insurance companies cover the bulk of the cost of \$40,000” (13). This cost includes the implant, rehabilitation and training. The benefits of the implant seem to outweigh any drawbacks.

In spite of its many positive aspects the cochlear implant cannot be looked at as a cure for deafness. After surgery “the ramifications of deafness are significantly reduced” (Tucker 13), but the individual is still Deaf. Johns Hopkins audiologists and physicians spend time counseling parents “to make sure that their expectations are realistic” (Malek 34). Parents also need to remember that the implant is “not for all Deaf people. It is recommended for those who are profoundly Deaf. This is not the ‘miracle cure’ for deafness” (Malek 35). Audiologist Donna Wayner, director of Albany Medical Center’s Hearing Center in Albany, N.Y. reminds us that “results still vary greatly” among those who have received implants.

The National Association for the Deaf (NAD) says that the cochlear implant can lead the parent to believe their child will lead a “normal” life. “This delays acceptance of

the child's deafness, and thereby delays early educational and communicative intervention processes, such as learning sign language" (Malek 35). The Deaf Culture "resists the idea that deafness is a defect that needs to be fixed or cured. For them, parents who implant their children are making the decision for them not to be a part of the Deaf Culture" (Malek 35). They feel the child will be categorized as "Hearing" and therefore leave the Deaf Culture.

Bill Boyle, a cochlear implant recipient, was asked, "Do you think that having a cochlear implant takes away your Deaf pride?" He answered, "I feel the implant enhances my pride" (Tucker 9). Niparko believes you can bridge both worlds. "With the cochlear implant you're taking ... successful members of the Deaf world and giving them access to the Hearing world" (Malek 36). This language does not show a desire to remove the individual from the Deaf Community, but rather to allow them to experience the benefits of both cultures. If parents choose to give their child a cochlear implant at a young age they may be giving them the chance to gain as much spoken language as possible and the ability to thrive in the Hearing Community. If parents choose to teach their child ASL at a young age they may be giving them a chance to excel at a visual language and gain access to a rich and diverse Deaf Community. If parents choose to do both the benefits seem limitless. The child can have the best of both worlds by drawing from the positives of both Communities and living their life to its fullest potential.

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