



Connect with Kids

WebSource

Video Short

Early Cochlear Implants

By CWK Network Producer

"We know if we can get that sound sensation into a child at those early ages, we can take advantage of the ripeness of those critical periods for developing speech and language."

- Cindy Gary, Audiologist

In the coming new year, 12,000 babies will be born with some degree of hearing loss. Some of those infants will receive a cochlear implant, a hearing device that is surgically implanted within the ear. The technology seems revolutionary, but the impact on a child's life may largely depend on timing.

Four-year-old Chelsea's favorite book is about airplanes. She loves to listen to her mother read it. The surprise is that Chelsea is completely deaf. She was diagnosed shortly after birth, and her parents immediately began to worry.

"What would that mean?" Jennifer Reiser, Chelsea's mother, remembers wondering. "There are all kinds of implications of deafness. You start to realize that if you don't hear you can't learn words, you can't learn all kinds of things."

But there was hope for Chelsea. When she was one, she received a cochlear implant -- a surgically implantable device that provides hearing sensation to individuals with severe to profound hearing loss.

"It helps me hear," Chelsea explains. "If I take it out I can't hear somebody."

The implant also helps Chelsea speak, and learn.

While Chelsea may seem young for a hearing implant, research found that the earlier deaf children get implants, the better. "There are certain critical windows in time that have been identified for learning various skills, and the speech and language skills occur at a very early age -- age three and younger," explains audiologist Cindy Gary. "So we know if we can get that sound sensation into a child at those early ages, we can take advantage of those critical periods."

In one study, 16 percent of kids who received cochlear implants at age four had normal language skills by age eight. But *three times* that many kids had normal language if they received the implants at age two.

The research isn't clear if getting implants younger than two is also beneficial, but the Food and Drug Administration has approved the device for one-year-olds, the age at which Chelsea received hers.

Today, Chelsea's language skills are comparable to hearing children her age. And next year, she'll go to regular kindergarten. Her mother believes that Chelsea's progress is connected to receiving the implant early.

As a mother, Reiser urges other parents, "Don't wait! I'm telling you, it's gonna be harder for that kid and they're gonna struggle and you're gonna struggle 'cause you waited. Let the kids hear. Let them speak. Let them understand language. There's so much to learn."

Screening Infant Hearing

By CWK Network, Inc.

Hearing loss occurs in newborns more frequently than any other health condition for which infant screening is required. Three out of 1,000 babies are born with permanent hearing loss, according to the Marion Downs National Center for Infant Hearing. Without screening, children with hearing loss are usually not identified until 2 years of age, which results in "significant delays" in speech, language, social, cognitive and emotional development. The Marion Downs Center calls late identification of infant hearing loss "a significant public health problem."

Early identification and intervention before the age of 6 months can have a positive impact on a child's development. Researchers at the University of Colorado found that children identified at birth with a mild-to-severe hearing loss and who received intervention before 6 months of age fall within a normal range of language comprehension and expression, as well

as social development. However, children with hearing loss diagnosed after 6 months of age experience significant delays in both language and social development.

What Parents Need to Know

The National Center for Hearing Assessment and Management offers these facts about newborn hearing loss:

- Each day, 33 babies (or 12,000 each year) are born with permanent hearing loss in the United States.
- Average age that hearing loss is identified is 2.5 to 3 years.
- Many children are not identified until 5 or 6 years of age.
- Eighty percent of the language ability of a child is established by the age of 18 months.
- Hearing is “vitally important” to the healthy development of language skills.
- Children with hearing loss who do not receive early intervention and treatment may require extensive special education services.
- Even mild hearing loss or hearing loss in only one ear has substantial detrimental consequences. Research shows that children with hearing loss in one ear are 10 times more likely to be held back at least one grade.
- Infants with hearing loss can be fit with amplification before they are 1 month old.

The implementation of universal newborn hearing screening has been endorsed by the American Academy of Pediatrics, the American Speech-Language Hearing Association and the American Academy of Audiology, Head and Neck Surgery.

Resources

- [Marion Downs National Center for Infant Hearing](#)
- [National Center for Hearing Assessment and Management](#)

Websource Video Link: [Websource/Video_Shorts/2015_updated_video_shorts](#)