

Getting, and getting used to, a cochlear implant

Narration transcript

Note: Passages in “quotation marks” are narration by Geneva’s mom. Passages in *italics* are also part the soundtrack. Passages in [square brackets] are either spoken dialogue or an explanation of what is happening.

00:13

“My daughter, Geneva, was born in January 2007. When she was 6 weeks old, my husband and I found out that she was profoundly deaf. A few months later, we learned that the cause of her deafness was genetic and that she would probably benefit from a cochlear implant. It was a tough decision because a cochlear implant requires major surgery. It requires drilling through the skull into the inner ear and threading an electrode array into the cochlea. But in the end, my husband and I agreed that a cochlear implant would offer Geneva the best chance at learning English and learning to talk.”

00:49

“We were relieved when she came through the surgery with no complications, and we anxiously looked forward to her activation day, one month later. That’s when Geneva would receive the external components of her implant and she would hear sound for the first time.”

01:06

“There was lots of information to take in on activation day, not the least of which was learning about the equipment. The external components consisted of the battery, the speech processor, which is like a mini computer, and the magnetic coil, which connects the external gear to the implant inside Geneva’s head. But our biggest challenge that day, and in the several days that followed proved not to be in the operating of the equipment but in keeping the equipment on her head.”

01:35

Lively background music.

02:05

“Slowly but surely, we were able to get the equip on Geneva’s head. The most important was the magnetic coil, which is where sound is actually transmitted from the external equipment to the implant and inner ear . No sound is received through the ear. The ear is just a convenient hook to hang the microphone and processor on.”

02:26

“Before turning on the microphone, our audiologist hooked Geneva’s processor up to a computer and sent sound directly into the implant. This helped the audiologist set the initial levels of the equipment. The idea was to give Geneva a small window of sound first and then to gradually open that window wider over the next few weeks. It took a while but Geneva eventually responded to the beeps.”

02:56

[beep]

03:20

[beep]

03:26

“Each time Geneva responded to a beep, the audiologist would light up a box that had either a dancing dinosaur or a dancing dog.”

03:50

[beep]

04:11

“Hearing tests with kids as young as Geneva can be tricky. There’s a fine balance between playing with them to keep them engaged and creating such a stimulating environment that they don’t bother to listen. Learning to listen is a key concept for kids with cochlear implants. Geneva may have been little too interested in these blocks to respond to some of the beeps.

04:36

[beep]

04:46

[beep]

04:52

[beep]

04:53

[beep]

05:06

[beep]

05:10

“After the initial levels were set, it was time to turn on Geneva’s microphone. Because she has only one implant, she would have no idea where sounds were coming from. This is the first time she had ever heard my voice.

05:40

[Geneva’s mom: “Hi, Geneva, hi. Hi. Do you hear something? It’s okay. It’s okay.”]

06:02

[Geneva's mom: "Hello, Geneva. What is that? You hear something? Hi." Geneva seems to vocalize in response.]

06:19

[Geneva's microphone is off. Her mom is signing, "Where's the sound?"]

06:43

[Geneva's mom asks the audiologist if the microphone is on. It is and she begins talking to Geneva again.]

07:00

[Geneva's dad begins talking to her.]

07:10

"Eventually, it was time to head home."

07:22

"A couple months after the activation, it was time to go into the sound booth and try to get a sense of how much Geneva was hearing. I knew she was hearing a lot, because she'd react to even soft sounds at home, such as the sound of a spray bottle as I cleaned the kitchen counters. And she was babbling a lot too. But this would be the first thorough and systematic assessment of her hearing since the implant was activated."

08:16

Lively background music.

08:44

"In the sound booth, the audiologist played music over a speaker at various volumes and frequencies and we waited for Geneva to respond."

08:54

[Music in the sound booth begins playing.]

09:00

"Unfortunately, she was scared of the light-up faces on the wall that were supposed to provide positive reinforcement."

09:20

[Music in the sound booth begins playing]

09:30

"Despite Geneva's discomfort in the sound booth, the results were astounding. Before the implant, her hearing was tested up to the level shown by the red oval. Geneva couldn't hear anything. Now she was hearing at a level of a mild-to-moderate hearing loss, as shown by the yellow oval, and that's just what we could gauge from her behavioral responses."

09:54

“Her progress has continued to astound my husband and I. In this clip, notice how she responds to our questions with no visual cues from us.”

10:04

[Geneva’s mom: “Uh-oh. Uh-oh. Where’s your foot?”]

10:10

[Geneva: “Uh-uh-ahhhh.”]

10:13

[Geneva’s mom: “Uh-oh.”]

10:14

[Geneva: “Uh-uh-uh-ahhhh. Uh-uh-ah.”]

10:19

[Geneva’s dad: “Do you want your shoes? Do you want to put your shoes back on?”]

10:24

[Geneva: “Chooo?”]

[Geneva’s dad: “Shoes? You want them back on?”]

10:32

[Geneva’s dad: “No?”]

[Geneva: “oo-oooo.”]

10:36

[Geneva’s dad: “Do you want your shoes back on?”]

[Geneva makes a vocalization that sounds almost like “no,” as she shakes her head.]

10:48

[Geneva’s dad: “Where’s your shovel? Where’s your shovel?”]

10:54

[Geneva: “doo doo.”]

10:57

[Geneva’s dad: “Your shovel. Where’s your shovel?”]

11:05

[Geneva’s dad: “I see it.”]

11:06

[Geneva’s mom: “Can you give the shovel to mommy?”]

[Geneva's dad: "Can you give the shovel to--"]

11:12

[Geneva's dad: "Yeah. That's right. That's your shovel."]

11:17

[Geneva's dad: "Can you give the shovel to mom? Can you give the shovel to mommy?"]

11:23

[Geneva: "Mummm."]

11:27

[Background music begins playing. Dialogue continues between Geneva and her parents.]

12:10

[Geneva hears birds chirping and crows cawing.]