Implant turns on the world to Evans patients



By Jeff Troth, MEDDAC PAO

"In 2004 I woke up one morning and I had a bad case of vertigo, the whole room was spinning and I had lost hearing in my right ear," said Lt. Col. James Morrison, the U.S. Army Medical Department Activity – Fort Carson troop commander. "I went to the emergency department and they treated me. The vertigo eventually went away and never came back, but the hearing never came back."

In the past 12 years, Morrison has seen ear, head and neck, and neurology specialists at the six posts where he was stationed, but to no avail. None of them could determine what caused the deafness in his right ear; their best diagnosis was that a virus destroyed his inner ear.

"I arrived at Fort Carson this summer and went for my annual hearing test," Morrison said. "I told them that I am profoundly deaf in my right ear and they weren't going to get any responses from me on that side."

During that visit, Dr. Elizabeth Searing, chief of Audiology Services at Evans Army Community Hospital, asked him if he had ever considered a cochlear implant, a procedure the hospital was just starting to offer to its adult patients.

A cochlear implant is an electronic medical device that replaces the function of the damaged inner ear. Unlike hearing aids, which make sounds louder, cochlear implants do the work of damaged parts of the inner ear (cochlea) to provide sound signals to the brain.

The procedure is done on an out-patient basis. During the 2-hour surgery the doctor makes a small incision behind the ear to insert a receiver under the skin and attach an electrode array to the hearing nerves within the ear. Morrison went home the day of his surgery and was up and about the next day.

"We are the only medical activity [at this level] in the Department of Defense that is doing cochlear implant surgery," Searing said. "They are being done at some of the larger medical centers, but no other community hospital offers this procedure to their patients."

Previously, in order to receive a cochlear implant, a patient had to have profound hearing loss of 80 decibels or more in both ears. Searing said that the thought process used to be that hearing in one ear was good enough.

"But, like you need two eyes to see distance you need two ears to hear distance," Searing said. "That is particularly important for our service members who are deployed. They need to be able to find where sound is coming from, where the enemy is, for their safety and the safety of their teammates."

Searing said that it is also important for those not in a combat situation to be able to locate sounds, such as a honking horn or a crying child.

"I have three children, and not being able to hear them has always been in the back of my mind," Morrison said. "When our children were young, my wife was an OR nurse and on the nights that she had to work or go in early I would do the best I could not to sleep on my good ear, so that if the kids needed me I would hear them."

He jokingly said that not hearing the kids when they were disruptive in the car was a big plus to being deaf on the right side. But the biggest negative was not being able to tell where sounds were coming from.

"The biggest challenge was not being able to positionally relate to a sound," said Morrison. "I couldn't tell you if the sound was coming from my right side, left side, or behind me."

Morrison's positional awareness of sounds is now coming back to him with the help of his wife, Melissa. She walks around behind him making noises and he tries to guess where that sound is coming from.

"The ear is like a muscle that you have to exercise," said Searing. "It takes time for the brain to relearn the spatial cues."

"It blows me away that a simple Army readiness requirement, getting my hearing checked, has ended up giving me back my hearing after 12 years,"

Morrison said. "Because of Army Medicine, there is now so much more that I can hear."



Dr. Elizabeth Searing (right) makes initial adjustments via a computer to Lt. Col. James Morrison's cochlear implant. Dr. April Luxner, an audiologist with Cochlear Corporation, was on hand to witness Morrison's reactions to hearing with his right ear after 12 years of deafness. (Photo by Jeff Troth)