Hearing Solutions SIG

February 11, 2016

Members Sharing with Members

Nelda McQuary - **What Is T-Coil and What It Means to You**

I want to discuss T-coil and the benefits for us experiencing hearing loss. I mentioned in last week's Newsletter that our Classroom is now looped. The Annex was looped in 2012. Because of our SIG & the tremendous efforts of our former leader, Gary Shephard, this is the first room in Sun City looped for T-coil transmission.

You may ask, "What is T-coil & what does looped mean?" This my simple explanation because I don't understand the complicated version.

The wiring that runs around the perimeter of this room is called an inductive loop? The electric current, in the wiring, transmits communication signals which are picked up by a neck loop, iCom or lapel receiver and is transmitted to T-coil equipped hearing aids. In large rooms like the Ballroom and Atrium, many loops must crisscross the area for continuation of the signal. AND this month our Classroom was looped.

How can T-coil help you? Some hearing aids are made with a tiny coil of wire around a core that will induce an electric current when it's in a looped magnetic field. A T-coil aid will not be the smallest aid available if it has T-coil. It has to be a little larger to make room for the extra tiny coil of wire. Your provider has to activate the T-coil by using the special program in their office that also adjusts the other programs on your aids.

I know individuals that actually bought aids with T-coil but the provider never activated it or even told the patient that it was there. Be sure to ask your provider if your aids have T-coil if you don't know.

With T-coil aids, one program is designated to T-coil. When that program is selected, the voice coming from the speaker's mic, in a looped environment, comes directly into your hearing aids, AND all background sounds are muted - you only hear the speaker's voice. Most aids have a second T-coil program where background noises are not muted; therefore you hear the voice coming from the mic but can also hear all other sounds. It compares to wearing a headset with only one pad on one ear. I use the first T-coil setting in noisy environments – it's wonderful to cut out all the background noise, like in a noisy restaurant, and usually I can hear most everyone sitting at my same table.

What if you don't have T-coil hearing aids? Here in the Computer Club we have several T-coil receivers which pick up sounds coming from the mic and are transmitted to the wearer via headsets or ear buds. We have headsets for sale for $3 per pair if you want your very own or you can bring them from home – your plug will fit the receivers. The receivers/headsets are really working well in the classroom. We urge you to try them if you find it difficult to understand what is said in the classroom or in the Annex. Ask your Instructor or leader to use a receiver.

If you are considering new hearing aids, it is very important that you discuss T-coil with your provider. I understand that not all providers have a discussion with patients about T-coil. Making a purchaser aware that T-coil is available is a law in some states. Some aid models are not made with the T-coil technology.

Most meeting rooms in our new amenities here in Sun City shuld be looped. The Palace is looped and the difference in understanding is unbelievable. It is very important for you to understand the benefits of T-coil before purchasing new aids. Remember, your existing aids could have T-coil technology – ask your provider. An inductive loop can be installed in one room or 2 adjoining rooms of your home. You can always contact me should you have any questions about T-coil.

Edna Heard – **My Journey to Find the Right Aids**

I went through six or seven hearing aid brands, some the same brands, but more expensive. I tried to find aids in G/town, so, I could go in and get them adjusted as needed. I started off with Tejas in Round Rock, Dr. Jill Mendez. It took some time to find hearing aids that worked for me, and at one point I had given up as I was

convinced it was my ears and not the aids that was the problem. I tried less expensive to more expensive aids of the same model. I wanted the T-coil, and the TV sound into the aids. I was not interested in Bluetooth. I did not keep notes on the aids, brands or models, as I didn't think I would need that in future, but can give most of the brands I tried. I was asked by each one when I had trouble hearing, which was meetings, restaurants and theatre. I had one hearing test, but all of them looked in my ears for wax. There was no particular pressure to buy, which I appreciated. I was given enough time to thoroughly test each brand before I was expected to decide. Looking back, I found the most valuable attributes of the provider was, not so much their ability, but the product's performance. The last aids, which I bought were fitted by someone who is not even an audiologist. I didn't realize this until after I bought the aids. I am very pleased now and thankful I didn't give up.

Marlene Sloan **- <u>The Apple Watch - an Aid for Hearing Loss</u>**

Can't hear your phone ringing, or you hear it, but can't remember just were you left it?

The Apple watch can assist with answering a phone call, just like other remote Bluetooth devices. And for those with severe hearing loss, you don't have to hear it ring, the watch will nudge your wrist with vibrations called a "haptic". Yes, you can answer speaking right into the microphone on the watch.

The Apple watch is not connected to your hearing aid, you will not hear a conversation through your hearing aid. It simply serves as the first step - to let you know you have a call, and the opportunity to answer the call through the microphone and speakers in the watch.

Specifications: The Apple watch is an extension/Bluetooth of your Apple iPhone, so you need to have an iPhone. You need to be comfortable with the basic functions of the iPhone, Settings and use of the iWatch App.

If you are comfortable with using your iPhone for social networks, photos, texting, emails and other computing functions - yes - you can do that on your watch. I will be happy to show you my Watch & discuss the features if you contact me.

Dennis Moser **- <u>A Cochlear Implant Journey</u>**

I no longer hear what most others of my age hear. Fifty-five years ago, I sustained a service-connected injury to my hearing. My hearing loss has progressed to a point that the Veterans Administration recommends I receive a hybrid cochlear implant. My surgery is scheduled for March 1, 2016 at the Temple VA Hospital. This will be a process thought, perhaps, to be of interest to the Sun City Hearing SIG. If there is interest, I will be pleased to share my experience on this journey.

In the beginning, I had tinnitus (ringing of the ears) and bilateral hearing loss. I was told that upon discharge from the Army, I would have VA benefits. In my busy early years, I did not worry too much about these benefits and lived with the condition.

In the early 1980s, the condition worsened. The tinnitus was louder and I was having increasing difficulty hearing in meetings and one-on-one interviews with my clients. I went to the Neurosensory Institute in the Texas Medical Center to have my hearing tested; they recommended a new generation of digital hearing aids that could be adjusted to amplify only at the frequencies at which I was hard of hearing. Although the aids did nothing for the tinnitus, they worked well in my work and social settings. I was pleased with the outcome.

After retiring in 2007, my hearing continued to decline. I applied for the VA benefits for which I was eligible. Fourteen months later I was approved and in 2011 was fit with a new set of Phonak Hearing Aides which provided a much improved hearing experience. In 2014, for reasons unknown, my hearing deteriorated quickly. The tinnitus was much louder and I was diagnosed with hyperaccucis – a condition of low tolerance for loud and/or sudden noise. Just the placing of a dish on a granite counter top sounds to me like a gun shot. It causes sudden pain in my ears and an automatic reflex that I cannot control. Most people I talk to sound as if they are in a tunnel. My own voice no longer sounds natural; I cannot hear how I sound to others. This is extremely difficult for a former professional who continually spoke before groups, gave papers at conferences and conducted workshops for clients across the nation.

In most recent VA Audiology testing, it has been determined that my hearing has diminished and that my ability to recognize words as they are spoken is limited. In November, 2015, I was fit with new ReSound Hearing Aids and was provided three iPhone applications by ReSound and Starkey that are helpful in controlling the hearing aids in different environments and retraining the brain to hear specific types of sound. Audiologists have recommended that I am a candidate for a hybrid cochlear implant. In my visit with the VA ENT Surgeon on February 9, 2016, it was verified that a cochlear implant was the best solution for my hearing issues. Surgery is scheduled for March 1, 2016.

Preparation for surgery and postoperative-care are extensive. The proposed schedule of events is as follows:

- Tested and certified eligible for cochlear implant by the VA Audiologist – January 28, 2016
- Certified by the VA ENT as a candidate for the hybrid cochlear implant – February 9, 2016
- Lab workup, chest X-ray and interview with a nurse practitioner – February 12, 2016
- Pre-operative physical with VA Primary Care Physician – February 18, 2016
- Skull and ear MRI at Temple VA Hospital – February 18, 2016
- Pre-operative workup by VA Anesthesiologist – February 18, 2016
- Outpatient Surgery orientation at Temple VA Hospital – February 18, 2016
- OP Surgery Hybrid Cochlear Implant at Temple VA Hospital – March 1, 2016
  - ✓ Noted that during the one-month period between surgery and implant activation, I will have no hearing in my right ear
- Follow-up visit with the VA ENT at Temple VA Hospital – March 16, 2016
- Initial activation of the cochlear implant at Austin VA Clinic – April 4, 2016
- One-week reprogramming at Austin VA Clinic – April 11, 2016
- One-month reprogramming at Austin VA Clinic – May 9, 2016
- Three-Month reprogramming at Austin VA Clinic – About September 1, 2016
- Every three months for a year, reprogramming at Austin VA Clinic
- Follow-up every six months to a year thereafter

If appropriate, I will report back to the Hearing SIG on a regular basis to share my experience with the process for the hybrid cochlear implant.

Gary Anderson - **My Deaf Life**

My first experience with hearing loss was not my own; rather it was my Fathers. For many years after he retired, he led an active social life; played golf; loved to play cards – he enjoyed life – he was fun to be around. But gradually his hearing loss became more & more severe. His hearing aids became useless. Volume didn't matter – you could hear his TV a block away – you could project your voice at its maximum – he knew the TV was loud – he knew you were trying to tell him something; but he was unable to understand – he could not comprehend. So he became a recluse; stopped playing cards; no more golf; life could not have been fun. But I never heard my Father admit that he had a hearing loss; I never heard him say that he was unable to hear or understand. What I learned from Dad was that I didn't want to duplicate his experience. I believe it's important to let people know that you can't hear.

My hearing loss was a gradual process. A little over ten years ago I was the Texas regional manager for the country's largest purveyor of Reverse Mortgages. Managing a team meant lots of phone time; lots of time in meetings. Participating in meetings became increasingly difficult. That led to my first "In The Ear" hearing aids. It wasn't long before I realized that my hearing loss was in the "profound" category. Thee ITE aids were soon replaced with a "Behind The Ear" type which worked well for a few years. In 2008, I purchased Phonak's "new & improved" version which I still have. Shortly after that, I became aware of Phonak's "Com-Pilot." This has been an absolute salvation for my phone use.

But last year, my hearing loss began replicating my Dad's experience. The sound volume was rapidly becoming irrelevant – I was unable to comprehend & understand speech. Music is just garbled noise; tunes I have known for most of my life now unrecognizable. For over 3 years I served as Secretary of our community's Wildlife Committee. I resigned last November as it became painfully obvious that I was unable to participate in the Committee's discussions. I also resigned from the City's "Commission of Aging" as I was no longer able to hear & comprehend the discussions.

Last fall this SIG heard a presentation about the new “Maxum” implant. I thought certainly I would be a candidate for this device. I contacted their headquarters in Houston asking if they worked with any physicians in Central Texas. Thankfully there is one – Dr. James Kemper in Austin. Dr. Kemper is very popular – I was able to get an appointment two months later. But first came an appointment with an audiologist. This involved the most comprehensive hearing test I have ever had. This test confirmed that I indeed have a very severe hearing loss, but it also indicated that my “Comprehension Level” was 11%. In other words, I only understand about 10% of what I hear; I’m just guessing at the other 90%, so if someone comments about the dismal state of the Stock Market, they are probably confounded when I reply that “I don’t particularly care for any of the presidential candidates, either.” Conversations are a real challenge. – After reviewing the test, Dr. Kemper said that the Maxum implant would be of little use to me. Instead he recommended a Cochlear Implant.

This was followed by more testing & consultation. Dr. Kemper displayed & explained implants from various manufacturers. The ultimate choice was the equipment from Advanced Bionics. Then, about a month ago (January, 2016) he did the implant surgery. The following week the device was activated. (The implant was done on my left ear; I continue to use a hearing aid with my right ear.)

I can best describe the outcome as an ordeal. In the ten days following the activation, there was a constant clatter & continuous chirping; today this is much milder. But, does water whistle when it flows from a spigot? That’s not how I remember it sounded. I still have little ability to comprehend sounds through the implant. My Com-Pilot does not function well at all – I’ll place it around my neck; turn it on; and hear the “On” message via the implant. There is no connection with the hearing aid. So when I want to use the phone or watch/listen to TV, I must first remove & disable the implant; then remove & disable the hearing aid. Then re-install the hearing aid; establish the Com-Pilot connection; activate & install the implant. Very inconvenient. I thought the implant would eliminate, or at least, reduce, background noises. So far, restaurant conversations continue to be nearly impossible.

The audiologist claims “it will take a while before your brain adjusts to the new sounds.” I guess I’m a slow learner. I can only hope she is right. To date, there is no improvement in my hearing or comprehension.

Steve Knowles - **Life with a Cochlear Implant**

Personal account of life with a cochlear implant since its insertion in September 2014, and reported to the Hearing Solutions SIG on October 9, 2014. The presentation was divided into three parts for the audience:

I. History of the conditions that preceded the surgery to put the cochlear implant in place and the story around the surgery and recuperation.
II. Brief description of a Cochlear implant apparatus and how it works
III. Results of the implant for hearing in the world again

Steve reported that his hearing loss is hereditary caused by bilateral tumors in his head that have increased in size over time to the point that they have impacted the eighth auditory nerves’ abilities to carry sound impulses to the brain. This medical situation is indicative of the effects of Neurofibromatosis II, which manifests itself as schwanoma tumors and is usually passed genetically from one generation to another and contributes to loss of hearing. Steve’s mother had NFII yet she lived to be 90. He noted his hearing declining in both ears in his 40’s and wore hearing aids until he lost total hearing 18 months ago. He was also proactive in getting professional consultation from both the Mayo Clinic in Rochester, Minnesota and the House Ear Institute in Los Angeles, California. Locally, Steve utilized Dr. James Kemper of the Austin Ear, Nose, and Throat Clinic in Austin as his guide on decisions as for the ultimate use of a cochlear implant whenever his hearing reached a point that poor hearing impacted his daily life. Since discussions and education had preceded the event that resulted in total deafness, the decision to obtain a cochlear implant was easy and quick. Deafness was on August 17, 2014; surgery was done by Dr. Kemper on September 10, 2014, and the implant was activated on August 18, 2014, and at which time Steve could hear again. Recuperation was quick and painless.

A cochlear implant is very different from a hearing aid. Hearing aids amplify sounds so damaged ears may detect them. Cochlear implants bypass damaged portions of the ears and directly stimulate the auditory nerve. Signals generated by the implant are sent by way of the auditory nerve to the brain, which recognizes the signals as sound. A cochlear implant consists of external parts and internal parts. These include a microphone, which picks up sound from the environment; a speech processor which selects and arranges sounds picked up by the microphone; a transmitter

and receiver/stimulator which receives signals from the speech processor and convert them into electric impulses; and an electronic array inside the inner ear which is a grouping of 22 tiny electrodes that collects the impulses from the stimulator and sends to different regions of the cochlea and the auditory nerve that ultimately transits them to the brain. An implant does not restore normal hearing; instead it can give a deaf person a useful representation of sounds in the environment.

Steve's hearing in 2014 was around 10% in the left ear, and around 30% in the right ear, but hearing aids still allowed him to function. Today, his hearing is <5% in his left ear and 0% in his right ear. But with his cochlear implant functioning, his hearing is nearing 75% and able to participate in a hearing world again. The past 16 months have a period of wonderment as to hearing sounds that were lost long ago. Yet the transition of sounds coming into the brain via the cochlear implant is still a work in progress. Musical sounds, particularly harmonies, are slowly returning but not to the full extent of a hearing person. Background noises interfere in full interpretation of conversations just as they do when wearing a hearing aid. Some direction sounds are impacted until the source is determined. Steve considers those challenges minor in light of he can hear birds, water, grandchildren, TV, and even wind again. His miracle has changed his life.

Meeting Adjourned – Next meeting March 10, 2016