

## The Importance of Playing a Musical Instrument

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“Music is a world within itself, with a language we all understand.”

Stevie Wonder

Those of you who are familiar with me know that I very much enjoy music. I enjoy listening to it, attending concerts, and even playing in a band. I enjoy almost all genres of music from classical, jazz, to blues and even heavy metal rock. Yet for many people with hearing loss, music is difficult to enjoy. This is particularly true for many cochlear implant users. In fact some, CI users even describe music as being an aversive stimuli.

There are many things that I have done from an equipment standpoint that has helped me enjoy music. These include the following:

1. Use of a dedicated music program in my hearing instruments.
2. Use of both acoustic stimulation (hearing aid) and electrical stimulation (cochlear implant)
3. Listening to music in a quiet environment without any other distracting noise.
4. Use of my Roger, and in the past FM system, plugged into my iPod.
5. Use of FM technology while playing with my band.
6. Downloading the lyrics to my favourite songs to learn the words.

However, I believe that one of the best things I have done for myself to have greater appreciation and enjoyment of music is to actually play musical instruments.

Music is a language with a set of rules that one must follow. Think about our patient's ability to understand speech. A patient with a hearing loss will have a much easier time understanding speech in their native language compared to a second language that is still emerging. Patients will understand familiar topics better than unfamiliar. Deaf people who use American Sign Language as their primary means of communication will have greater difficulty lip-reading English than deaf people who are native speakers of English. Having this language base stored in one's head allows for top down processing to supplement what is missing and to better decipher the words that is bombarded at them.

Similar benefits come from musical training. Years ago I took piano lessons, but regrettably stopped after about 4 years. Yet when I play scales on guitar, bass, or trumpet, I still envision the notes on the piano keyboard.

Learning to play the bass and performing in a band has trained my ears and brain to be able to listen to various instruments better. When our guitarist would use a delay pedal, a chorus pedal, or add distortion effects, I now can “hear” this better when I am listening to recorded music. I can hear the difference between the crash versus the ride cymbal, and the snare versus the kick drum

from our drummer.

I took the added steps of buying some basic books on music theory. Although I cannot tell you the exact musical key a song has been written in, I know that most songs in popular music use the chords based on the first, fourth, and fifth note of a scale. Thus, I can hear the relative chord progressions of many songs. Moreover, I know that I need to use the Ionian, Lydian, and Myxolydian modes for most of my bass playing. It is amazing how much music that you hear is based on this I-IV-V pattern.

Recently, I have taken up cornet lessons. I played trumpet very briefly in high school, but have not touched the instrument in over 35 years. I decided to do this because the remaining acoustic hearing that I have in my non-implanted ear is progressively getting worse. I am concerned that I may not be able to play my bass guitar anymore in a few years. I have difficulty hearing the bass through my cochlear implant alone. So rather than cry in my beer, I have taken the proactive steps of learning to play an instrument that is audible with my CI alone. I rented a few instruments and decided the cornet was easier to “hear” than the trumpet at least for my ears. Thus if my hearing in my non-CI ear should continue to deteriorate to the point that I cannot play the bass anymore, I already have a replacement waiting in the wings. I may not get good enough to perform publicly with the cornet, but it will still allow me to be engaged in a passion that is an important part of my life.

Even with only four lessons so far in cornet, I can now “hear” things in recordings that I have not heard before. First, I am starting to hear the differences between a trumpet versus a cornet versus a flugelhorn. These are all Bb instruments with the exact same fingering and fundamental frequency; however, the harmonic overtones and therefore instrument “colour” is different. I am also starting to be able to hear the difference between muted versus unmuted trumpet playing, not based on the sound intensity differences but rather on the tonal differences. There is no way I could have been able to do this without musical training.

I firmly believe that if our patients with hearing loss wish to have greater musical appreciation, we should encourage them to enroll in musical lessons. Doing so helps learn the “language” of musical composition and serves to train the auditory system to hear the differences between musical instruments. It is rarely too late to start as I really did not become heavily involved in music until I was in my 40s with a severe-profound hearing loss.