

## 5 Tips on Cochlear Implantation- Evaluation and Considerations in Your Care

By: Dr. Casey Rutledge Roof

For a lot of people struggling to hear with hearing aids, this is the time to ask yourself, “Is there something else that can help me hear?” The answer is yes.

If you have experienced a decline in your hearing performance, are dissatisfied with your ability to communicate one on one or in groups, or have significant hearing difficulties in one or both of your ears, this is the time to explore a cochlear implant as a solution to your hearing problem. This article poses to answer some questions we are often asked as hearing professionals as a starting point to a journey with cochlear implantation.

### **HOW DO I KNOW WHEN I SHOULD CONSIDER A COCHLEAR IMPLANT?**

The most asked question we receive is the one above. The simplest answer to knowing when to consider a cochlear implant is ask yourself the following questions:

- How well am I doing with traditional means of hearing, as with hearing aids?
  - Do I enjoy the sound quality of my hearing aids?
  - Am I missing out on activities because of my inability to hear, even with hearing aids?
- Can I carry on conversations in one on one settings?
- Can I carry on conversations in group settings?
- Can I hear at a distance, like at church or theater?
- Do I struggle to hear in background noise?

If you self-reported ease in carrying on a conversation one on one, in small groups, and in background noise with ease, etc., then a cochlear implant is most likely not an appropriate means of helping your hearing difficulties; however, if you struggle in everyday communication or in specific settings, then cochlear implantation may be for you.

The first step in identifying and managing your hearing problem is getting a hearing test with an audiologist. Audiologists are specially trained to identify hearing and balance related disorders. Once your audiologist identifies your hearing loss, then he or she can appropriately direct you to services or devices that are appropriate for your hearing loss. This may include the use of hearing aids, personal amplification devices, or over the counter devices. One critical step in the fitting of these devices is to make sure your audiologist completes a process called **verification** on the day of your hearing aid/device fitting. Verification is a critical component to ensure you are getting enough volume to your hearing aids. Verification considers your age, hearing loss, and physical properties of the ear to identify where the hearing aids should be adjusted for volume to appropriately and accurately meet your hearing needs. If your hearing aids are appropriately fit using verification, and you are still having trouble with communication, then you’ve crossed a critical milestone to show that even with appropriately fit hearing devices, non-surgical management is not optimal for the best hearing performance. This is a

step within in the journey to a cochlear implant to prove surgical management is most likely the best option to help you in achieving your hearing goals versus hearing aids.

*Quick Tip: If you've tried appropriately-fit hearing aids using evidenced-based practice tools, such as verification, and you are still unhappy with hearing performance, you should consider a consult for a cochlear implant.*

## **HOW DO I GET STARTED IF I THINK I AM INTERESTED IN A COCHLEAR IMPLANT?**

If you express to your audiologist your struggles in communication, and your needs cannot be met with better hearing device technology, using appropriate fitting (verification as mentioned earlier), or implementing better communication strategies between yourself and your communication partners, your audiologist should direct you to hearing professionals with interest and experience in cochlear implant programming and evaluation. The cochlear implant evaluation is a two-step process. The process includes an evaluation with an audiologist with training in cochlear implants and a consult with a surgeon who has specialty training in cochlear implant surgery. Typically, the evaluation process is started with the audiologist.

If you are scheduled to complete a cochlear implant evaluation, your cochlear implant audiologist may update your hearing test without hearing aids (unaided audiogram) and will program hearing aids to use in the evaluation process. The evaluation process is fairly simple but can be lengthy for some people, and on average, the evaluation process takes around an hour to an hour and a half. During the evaluation, you will be required to repeat back sentences or single words, so the audiologist can evaluate how well you perform with hearing aids in different settings. At the end of the evaluation, your audiologist will let you know if you qualify for a cochlear implant. If you qualify for a cochlear implant, at that time your audiologist will likely do a brief overview of the cochlear implantation process and give you take-home literature to review prior to your consult with the surgeon. The surgical consult will likely consist of a complete medical case history, overview of the surgical process and the recommendation of imaging to observe if the ear(s) structures are suitable to have a cochlear implant. Following your initial evaluation and surgical consult, you will meet with the audiologist again to have an in-depth review of the cochlear implant process and device, time to ask questions, device selection, review expectations and management with the cochlear implant. You will also have a follow-up with the surgeon to discuss the findings of the imaging (CT or MRI) and review the surgical process again.

*Quick Tip: Ask your hearing professional if there are other non-surgical options for you to achieve success with hearing (better hearing aids, better ways to communicate with your loved ones, etc.), if not, a cochlear implant evaluation should be considered.*

## **WHAT QUESTIONS DO I NEED TO ASK AN AUDIOLOGIST REGARDING CANDIDACY FOR A COCHLEAR IMPLANT?**

Usually, your audiologist will explain your candidacy and leave time to answer questions during your evaluation. You may want to ask the audiologist which ear he or she prefers for the cochlear implant and why. You should ask the audiologist a realistic timeline for your progress with a cochlear implant. If you have factors that may limit or slow your progress with the device compared to other people, it is fair to know those expectations before moving forward with an implant. You may also want to ask the audiologist their experience and comfort with devices after you have chosen a specific manufacturer. You should also consider the time commitment and cost for receiving care. For the first year of evaluations and programming, I usually see the patient around seven to nine times during the first year of care as the patient is learning to hear and understand speech with the implant. After the first year of care, routine appointments are once per year with myself and the surgeon.

*Quick Tip: As you are reading through the literature your audiologist gives you on your initial meeting to take home, jot down some questions you think of along the way so you can ask at your follow-up to determine final device selections.*

## **MY HEARING PROFESSIONAL SEEMS TO KNOW LITTLE ABOUT COCHLEAR IMPLANTS. WHEN SHOULD I CONSIDER SOMEONE ELSE?**

This question can be an uncomfortable one to consider, but it should not be. If you have poor performance with the cochlear implant, and you are unsure about the extent of knowledge your cochlear implant professional exhibits, you do have the right for a second opinion by another professional.

Typically, if I have a challenging obstacle with programming to overcome, I am not afraid to reach out to the manufacturer to assist me with programming (two heads are better than one, right?!). Each cochlear implant manufacturer has a dedicated clinical, surgical, and recipient support staff to help each professional or patient along the way. I reach out to them for general questions and suggestions, and I may even have them with me during the patient's programming session or virtually in with us on the appointment.

If you are experiencing trouble hearing with your implant, the first thing we need to consider is, how long are you wearing the device in a speech-rich environment? If you are wearing the device consistently throughout the day (at least 8-10 hours a day) and are around others that can interact with you and facilitate communication, your progress would more likely than not be faster than someone in a quiet, non-speech-rich environment. We also need to consider, "Are you doing your homework?" For my patients, I require they perform a home-based program to help increase their understanding with the implant. These "homework" assignments can be computer or app based, or we can use low technology options for patients to work through with a communication partner. We also have to

consider your pre-cochlear implant history. Where you without hearing for more than 20 years? Did you ever wear hearing aids before getting a cochlear implant?

These wearing and pre-implant hearing history considerations, along with programming and support from the manufacturers, should give you comfort in knowing your hearing professional is doing the best for your care. If you are uncomfortable discussing a second-opinion with your hearing professional or do not feel he or she is meeting your needs with the cochlear implant, you are welcome to confidentially reach out to the manufacturer of the device for other provider suggestions in the area.

*Quick Tip: Ask yourself, did my audiologist attempt to program the device to meet my needs?, did he or she reach out to the manufacturer for assistance?, did my hearing professional attempt to listen to my needs and address them? If not, you can reach out to other professionals in your area, ask your friends who they see for care, or simply reach out to the manufacturer for other provider suggestions within the area.*

## **HOW DO I MAKE THE BEST OF A CI VISIT WITH AN AUDIOLOGIST?**

Write down your progress and any questions! If you keep a little journal or notebook with little hearing victories and communication challenges or experiences you've faced since the last time you were in office, the audiologist may be able to more quickly resolve your hearing difficulties versus making non-specific changes to the device along the way.

It is typically best to bring your communication partner along with you for the first several visits and anytime you are experiencing communication difficulty. The communication partner has different perspectives and thoughts on performance and can often be a great helper when trying to make the most from our programming visits.

*Quick Tip: Write down your experiences along the way. This help document what you have achieved in your hearing journey and what situations need improvement.*

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