



Cochlear Implant Process: Explanation of Evaluation Steps

Phase I

1. **Cochlear Implant Evaluation** – This visit with the cochlear implant audiologist will involve extensive soundbooth testing with and without hearing aids. The results of these tests combined with your hearing loss history is used by the audiologist to determine if a cochlear implant is likely to be helpful to you or your child. If so, the audiologist will counsel and educate you about cochlear implants so that you understand all that is involved before you decide to proceed with the rest of the cochlear implant process (2 hour appointment at The Hearing Center, A107).
2. **Otologic Medical Evaluation** – The physician at Dallas Ear Institute will take a full medical history, perform a physical exam, and review the hearing tests performed in step 1. If he agrees that a cochlear implant is the best option, the next phase of the evaluations can be scheduled (45-minute appointment at Dallas Ear Institute, A103).

You will also be advised to sequentially obtain two pneumococcal vaccines, the Prevnar and the Pneumovax, as recommended by the FDA and CDC, unless you are certain you have received them in the past. They must be given 2 months apart. If you have never had them, you should start this sequence immediately.

Phase II

1. **MRI or CT Scan** – It is required that all patients have a scan to evaluate the inner ear anatomy and screen for any brain conditions prior to cochlear implant surgery. Children usually require sedation or anesthesia for the scan; therefore, in their case, it is performed in Medical City's Radiology Department. Adults and older children have their scan performed in a nearby outpatient facility. A CT or MRI scan of the head that has been performed in the recent past can be evaluated to see if it is adequate for our purposes.

The physician's medical assistant will instruct you on how to schedule you or your child's scan (45 minutes).

2. **Genetics Evaluation (CHILDREN ONLY)** – In 80% of children born with hearing loss, the hearing loss is because of a genetic cause. Determining the exact gene that caused the hearing loss is helpful to the physician in understanding the condition. It also helps the parents understand how future children can be affected. Genetic blood testing for hearing loss is now very practical and cost effective. In some cases, it may be recommended that your child see a doctor who specializes in genetics. The geneticist will take a detailed family history, perform a physical exam, and possibly obtain a blood sample for genetic testing and later counsel the parents regarding the results.
3. **Auditory-Verbal Evaluation** – For ADULTS, this assesses (A) the effects of hearing loss in the patient's listening and speaking skills at home, work, educational and social settings, (B) the possible benefits of a cochlear implant, and (C) the need for hearing therapy and/or speech therapy after the cochlear implant is activated.

For CHILDREN AND ADOLESCENTS, this assesses the patient's potential for learning to (A) hear and comprehend spoken language with a cochlear implant, and (B) develop speech to use as a primary means of communication. The roles of the parent and the child's educational setting are discussed and how they impact the benefit from cochlear implantation.

For ALL patients, the purpose of short or long term therapy is discussed. Adult family members are encouraged to attend the evaluation to learn how to support the patient.

You will need to contact Linda Daniel at HEAR in Dallas at 214-282-9238 or linda@hearingimpaired.com to schedule your 1-2 hour appointment.

4. **Neuropsychology Evaluation** – For ADULTS, the purpose of the screening is to (A) obtain information regarding overall cognitive, adaptive, vocational, and emotional functioning relevant to preoperative concerns, and (B) assist the individual and their family in identifying and addressing current stressors and other factors which could influence compliance following cochlear implantation.

For CHILDREN AND ADOLESCENTS, the purpose of the screening is to (A) obtain information regarding overall cognitive, adaptive, emotional and behavioral functioning, (B) assist in developing a plan to address skills of compliance and independence relevant to cooperation in rehabilitation, and (C) answer questions, address concerns, and offer emotional and behavior support to enhance preoperative or postoperative rehabilitation.

This evaluation is usually not covered by insurance and requires the patient/parents to pay for the evaluation fee of approximately \$150 at the time of the visit. Insurance will not be billed for this evaluation.

You need to contact Dr. Nuche at 972-490-8834 or sarahnuchephd@gmail.com to schedule your 1 hour appointment.

5. **Videonystagmography (VNG) Balance Testing (ADULTS ONLY)** – This test involves a series of balance tests to determine the amount of balance function in each ear. The results of these tests can affect the choice of ear for cochlear implantation and help detect certain patients who may be prone to balance difficulties after cochlear implantation.

You need to contact Dallas Ear Institute at 972-566-7359 to schedule your 30 minute appointment (A103).

6. **General Medical Preoperative Exam by your Primary MD** – If you are age 40 or older OR of any age with medical conditions such as: high blood pressure, heart conditions, diabetes, etc., you may need to see your primary care physician for an exam that includes an EKG, Chest X-ray, and general blood tests. Your physician's office must fax us these results with a note from the physician stating that you are in reasonable condition to undergo the cochlear implant surgery.
7. **Insurance Precertification** – The insurance precertification will begin once your MRI has been reviewed by your physician at Dallas Ear Institute. Obtaining approval from your insurance company for cochlear implantation can take several weeks. Our cochlear implant insurance coordinator will be working diligently to obtain insurance authorization. Once your insurance provides authorization, our office will call to inform you of your estimated out-of-pocket expenses related to the surgery.

PHASE III

1. **Ordering Equipment/Scheduling Surgery** – When all of the above steps are completed, your audiologist will contact you to confirm which brand of cochlear implant you have chosen and will order your equipment. Once this step is completed, the Medical Assistant will contact you to schedule your surgery.
2. **Preoperative Appointment** – The day prior to your surgery, you will meet with your physician to review your surgery, your selected brand and confirm which ear is to be implanted. At this appointment, you will be provided the day/time of your future Postoperative Check and Cochlear Implant Activation (1 hour at Dallas Ear Institute, A103).

3. **Cochlear Implant Surgery** – The surgery takes approximately 1.5 hours. The majority of patients go home the same day of surgery except infants who often spend 1 night in the hospital. Further details of the surgery will be discussed with you by your physician and can also be found on our website at www.dallasear.com.
4. **One Week Postoperative Check and Cochlear Implant Activation** – You will return to see your physician one week after surgery to check the incision for proper healing. You will also see your audiologist for programming of the cochlear implant. You will leave the office with the cochlear implant functioning. This is the beginning of learning to hear with an implant. You will be returning to the audiologist for programming of the processor at regular intervals to slowly increase the amount of implant stimulation. You will also be counseled and educated on the external components of the cochlear implant system. (2 hours at Dallas Ear Institute, A103 and The Hearing Center, A107).
5. **Auditory-Verbal Therapy** – HEAR in Dallas will assist you in getting the most benefit through your cochlear implant for participation in the mainstream of society. This is a very important part of improving your performance with the cochlear implant. The frequency and duration of your Auditory-Verbal Therapy will be determined by your therapist at HEAR in Dallas.

Once you know the date of your Activation appointment, you will need to contact Linda Daniel at HEAR in Dallas at 214-282-9238 or linda@hearingimpaired.com to schedule your therapy session. Therapy will begin sometime after activation of your cochlear implant.