

COCHLEAR IMPLANT

A cochlear implant is a small electronic device that is surgically implanted and has given the gift of hearing to thousands of children and adults. Cochlear implants are not hearing aids, nor do they restore hearing. The implant converts sound energy into an electrical signal that gets transmitted to the cochlear nerve (nerve of hearing), and then to the brain.

The implant consists of an external device worn on the ear or body that contains a microphone to pick up sound in the environment, and the surgically implanted internal receiver/stimulator that converts the sound information to electrical pulses that send this information to the brain through the electrode placed in the cochlea (organ of hearing).

Our cochlear implant team is dedicated to providing patients with the best hearing health care and services.

Pre-operative Planning Protocol/Checklist: The following checklist is a general guideline for the pre-cochlear implant process. These steps must be completed for you to receive a cochlear implant.

- *Insurance authorization- this will be completed by our office, and can take up to 3-6 weeks. Authorization must be completed PRIOR to scheduling your surgery.
- *Hearing Aid Fitting/Trial- patient must have undergone at least a 4-6 month period of hearing aid use before having the cochlear implant evaluation.
- *Cochlear Implant Evaluation- performed by specific cochlear implant audiologist
McLaren Midland ENT Audiology (989) 794-9210
Central Michigan University Audiology (989) 774-3904
Petoskey ENT Audiology (231) 487-3277
- *MRI or CT scan- to be determined based on your history by surgeon
- *Vaccinations- you must have vaccinations (Pneumovax, Prevnar; Hib [children only]) to prevent against meningitis- you must have one prior to the day of the operation and may get the other after the surgery. We will give you a prescription to take to your primary care provider or health department to have these given.
- *Medical Clearance- If deemed necessary, a medical clearance from your primary care physician must be provided to us within 30 days of the date of the operation.

Cochlear Implant Surgery

-Risks of surgery:

- *Most often the hearing remaining in the operative ear will be gone after surgery, leaving the ear completely deaf until the implant is activated.
- *There is always a low risk of infection and/or bleeding with any operation, as well as risk from anesthesia.
- *Additional rare risks include spinal fluid leak, temporary or permanent facial weakness, dizziness or imbalance, taste change.
- *There is also a risk of undesired outcome with implant performance, and/or device failure with need for further procedures.

-Day of surgery:

- *Most often the operation is performed as an outpatient (same-day) procedure under general anesthesia.
- *Do not eat or drink after midnight the day prior to surgery (no coffee or breakfast the day of surgery).
- *Your primary care physician and/or anesthesiologist will review your medication instructions with you and instruct you what to avoid the morning of surgery.

-Post-operative care:

- *The head dressing must stay on for 24 hours and the incision be kept dry for at least 48 hours. You may wash your hair during this time over the sink with a cup over the ear and incision. Hair dye after 3 weeks.
- *The operation does not typically cause much post-operative pain, but you will be given pain medication after the procedure. We will only refill pain medication for post-operative pain for up to two weeks after the procedure, then you must discuss with your primary care physician.
- *No nose blowing or heavy lifting over 5 pounds for 2 weeks.
- *Most people take about one week off from work or normal activities- you may return to work sooner if desired. We will approve up to two weeks of leave.

-Additional post-operative information:

- *If you wear glasses, you may want to remove an arm as to be able to use your glasses with the head dressing in place and not put pressure over the incision.
- *It is normal to hear funny noises in the ear (buzzing, ringing, popping) and feel pressure or occasional sharp/shooting pains while the area heals.
- *Children with ear tubes in place will have ear drainage- this is normal. Use a cotton ball as needed and keep water out of the ear.
- *Call the office for any swelling, and/or redness of the incision site, fever, or other concerns.

Activation

You will schedule an activation appointment roughly 3-4 weeks after the surgery.