

COCHLEAR IMPLANTATION

Patient and Family Information

What is a cochlear implant?



A cochlear implant is a hearing device that bypasses the impaired outer hair cells. It can give children, even with permanent severe to profound hearing loss, the ability to hear the full range of speech sounds. This is critical for development of speech and language.

Why do I need a cochlear implant?

A cochlear implant is different from a hearing aid.

Hearing aid

- Makes sounds louder.
- Sounds still have to travel through an impaired inner ear, specifically the hair cells of the cochlear

Cochlear implant

- Bypasses the damaged hair cells
- Stimulate the auditory nerve directly

A cochlear implant may be a good choice for you if:

- Hearing aids provide little acoustic benefit
- Listening and talking is the desired communication outcome
- The anatomy is intact to support this technology

It is important to:

- Discuss any general health problems with your surgeon and the need for preoperative anesthesia assessment.
- Ensure immunisations are up to date
- Take note that additional imaging or hearing tests may be required prior to surgery.

What are the risks and potential complications of a cochlear implant?

- Bleeding
- Infection
- Pain
- Scar
- Swelling of the ear or scalp
- Facial nerve injury or temporary weakness
- Dizziness following surgery
- Hearing loss, ringing in the ear (tinnitus)
- Taste disturbance temporary or permanent
- Meningitis and leakage of cerebrospinal fluid into the ear or nose
- Device failure which may require replacement
- Electrode migration of a cochlea implant which requires a second surgery to reinsert it to its proper location

The Procedure

An incision will be made behind and slightly above the ear. These areas will usually heal without problems or obvious scars. A small amount of hair behind the ear may be shaved. There may be a mastoid dressing around the head that has to be kept on for 24 to 48 hours after the surgery.

You will likely stay in the hospital for one to two days post-surgery.

Before surgery:

1. Do not take medications or traditional herbs that may potentiate bleeding seven days before surgery.
2. Wash your hair the night before surgery. Do not wear any makeup or jewellery the day of surgery.
3. Do not eat or drink anything (including water/milk/juice) after midnight before surgery.
4. If you have regular medications, the dosage of medications may have to be adjusted on the morning of surgery.

After surgery:

1. Postoperative medications may include analgesia, antibiotics, steroids, antacids or any others as required. These will be discussed on the day of discharge.
2. After discharging from the hospital, you may resume most activities normally. However, do not do any heavy lifting or any vigorous exercises (jogging, tennis, aerobics, PE).
3. You may wash your hair carefully five days after surgery.
4. Do not take any medications or traditional herbs that may potentiate bleeding seven days after surgery unless instructed by the physician.
5. Flying is usually permitted one week after surgery.
6. Check with your doctor before resuming swimming or other water sports.
7. You may return to school seven days from the date of surgery.
8. You may hear a variety of strange noises in your ear, such as cracking, popping or ringing, and you may experience a feeling of “fullness” or pressure in your ear.
9. It is normal if you experience pain when chewing.
10. Your ear may protrude or stick out for a week or so after surgery. This is normal and is due to edema or swelling of the tissues after surgery. This swelling may even migrate to the tissues in front of the ear or around the eye.

Post-operative care

Call your doctor or the clinic immediately if you experience any of the following:

1. Fever (oral temperature above 38 degrees Celsius)
2. New weakness or numbness of the face
3. Pain that is not helped by taking pain medication and is getting worse rather than better
4. Severe new headaches
5. Redness and/or swelling around the incision
6. Severe vertigo and vomiting

Cochlea implantation should not be taken lightly. For the patient to successfully benefit from a cochlea implant, the patient and his/her family have to be committed to the rehabilitation process after the surgery.

Should you have any pre or post operation queries, please call us at 6772 4551 or email us at ent_fc@nuhs.edu.sg.

For urgent medical attention, please walk into the clinic during operating hours (Monday to Friday, between 8:30am to 5.30pm) or visit the Emergency Department after clinic hours.

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