

What is a cochlear implant?

A cochlear implant is a small complex medical device that can help provide a sense of sound to a person who is profoundly deaf or severely hard of hearing. Rather than amplifying sound like a hearing aid, it works by stimulating the auditory nerve directly through the cochlea thus bypassing the damaged inner ear.

Why does my child or youth need this surgery?

There are two main reasons why your child may need a cochlear implant:

- They have profound hearing loss in one or both ears.
- They get little to no benefit through the use of hearing aids.

How to prepare for surgery

You should start preparing at least one week before your child's scheduled surgery date. Follow the instructions below and carefully read the Preparing for surgery booklet for more detailed information.

1. Make sure your child does not take ibuprofen or anti-inflammatory medications for one week before surgery. Do not give:
 - Advil® or Motrin®
 - Aspirin®, Aleve® (ASA) or Pepto-Bismol®
 - Naprosyn®
 - Gingko
 - St. John's Wort
 - Garlic or ginseng supplements
2. Acetaminophen (Tylenol® or Tempra®) and over-the-counter cold medications may be given or antibiotics as needed or prescribed.
3. Tell your doctor if your child bruises easily, or if anyone in your family has had problems with anesthetic or bleeding tendencies.
4. Call the ENT office at CHEO to notify the surgeon or nurse if there is drainage or bleeding from the ear prior to surgery. If the ear is infected, your child may need antibiotics to avoid any delays or cancellation with the expected surgery date.
5. Make travel plans as necessary. Your child will typically stay in hospital for 1-2 nights after surgery.



One parent must be in the hospital at all times. If you live outside of Ottawa, you'll have to plan ahead. Visit www.cheo.on.ca for a list of accommodations near CHEO.

5. Follow the diet and fasting instructions outlined in the Preparing for surgery booklet.

What happens during surgery?

During the surgery, your child will be given a general anesthetic to put them to sleep. The surgery typically takes 4 hours per implant. Your surgeon will review the details of the surgery ahead of time.

What are the risks?

Your child or youth's surgeon will recommend surgery because the benefits outweigh the risks. Risks include:

- General anesthesia
- Infection at the implant site
- Facial nerve weakness
- Bleeding
- Leakage of CSF fluid
- Taste changes
- Dizziness

How to take care of your child or youth after surgery

It takes most children a few weeks to recover after surgery. Make sure to instruct your child or youth to sneeze with their mouth open and try to avoid coughing or cough gently if needed.

Pain

Children may experience moderate pain after surgery. Pain medication may be needed around the clock for the first few days.



Medication

- Give Tylenol® every 4-6 hours. Make sure to follow instructions on the box.
- Give other medications only as prescribed by your surgeon. Morphine or other pain medication may be prescribed.
- Give anti-nausea medication, like Gravol® or stool softeners if required to help with nausea, abdominal pain and constipation.
- Do not give ASA (Asprin) or ibuprophen (Advil or Motrin). These medications may cause bleeding.



Fever

A low grade fever is normal for a few days after the surgery. Give acetaminophen (Tylenol®) as needed. Call your surgeon's office or go to CHEO's Emergency Department if their temperature is 39°C (102°F) by mouth, or higher.

Wound care

You will receive an appointment with the clinic nurse to remove the outer dressing one week after surgery. The steri-strips under the outer dressing will be left on for an additional 1-2 weeks. Trim the edges of the steri-strips if they start to curl up. Polysporin may be applied to the incision with a clean Q-tip once exposed.



Call your surgeon's office if the incision site has any redness, swelling, if it is warm to touch or oozing. Also, if you notice yellow, green or smelly discharge from the ear canal. You may notice dark red 'chunks' coming out of the ear. Do not worry, this is the dissolvable packing that was placed in the ear canal during surgery.

Water Precaution

It is Important to keep the area dry and prevent water from being on the incision for 2 weeks after the surgery. This is to prevent any infection at the skin incision.



If tubes were removed from the ear at the same time as the surgery it will be recommended that water in the ear canal be avoided. This can be done by putting Vaseline on a cotton ball and placing the cotton ball in the outer ear, covering the opening of the ear canal. It can also be done by holding a cup over the ear while washing the head. This should be done for three weeks after surgery.

Nausea, vomiting and/or Dizziness

Your child might have nausea, vomiting and/or dizziness. Gravol may be given. This should get better within a few hours..

Diet

Begin with a clear liquid diet, progress to a soft diet, and then to a normal diet as your child feels like eating.



Activity

Your child or youth may return to school or daycare after one week. They should refrain from recess or playing outside for two weeks. For the next six weeks, your child or youth should not take part in:

- vigorous activity
- physical education at school
- contact sports
- swimming (your surgeon will notify you when swimming is OK)
- air travel for up to two weeks post surgery

Your follow up appointment

If your child or youth requires a follow up appointment, you will be contacted by phone.

Contact information

General inquiries

CHEO ENT clinic nurse
Weekdays 8 a.m. - 4 p.m.
613-737-7600 ext. 3238

ENT on-call doctor
After hours (5 p.m. - 8 p.m.) and weekends
613-737-7600 ext. 0 ask for the on-call ENT doctor

CHEO ENT clinic physicians (Drs. Vaccani, MacCormick, Bromwich, Schramm, Rourke)
Weekdays 8 a.m. - 4 p.m.
613-737-7600 ext. 2706

Emergency

In an emergency call Ontario Tele-Health (1-866-797-0000), go to an after hours clinic or to CHEO's Emergency Department.

Community ENT offices

Dr. Chow: 613-759-0417
Dr. Henry 613-562-9000
Dr. McLean: 613-562-9000
Dr. Planet: 613: 746-2235
Dr. Scherer: 613-562-9000



Need more information?

Cheo.on.ca is the best place to find information on CHEO's programs and services and learn about a variety of health topics for children and youth. Visit our online resource section to access CHEO-recommended websites, books, apps, videos and more!