Cochlear implant risks and limitations

Surgical risks

- Slight chance of damage to the facial nerve or the chorda tympani nerve – nerves that pass through the middle ear space.
- Risk from anesthesia needed for the implant surgery is slightly higher in infants and young children compared to adults
- Some patients experience reduced balance function for a short period immediately following surgery
- A small percentage of implant patients have reported an increase of tinnitus (ringing in the ears) after the surgery compared with their previous experience

Cochlear implant recipients are unable to undergo certain medical procedures

- Magnetic Resonance Imaging (MRI) testing. Unless the recipient has an implant with a removable magnet or unless a lower magnetic field strength (measured in Tesla) is used for the imaging, this testing cannot be performed
    - Electrosurgery or diathermy in the vicinity of the implanted portion of the cochlear implant
    - Electroconvulsive therapy
    - Ionizing radiation therapy

Cochlear implants and Meningitis - children with cochlear implants have a higher risk of contracting the type of meningitis caused by Streptococcus pneumonia (pneumococcus) than children who do not have cochlear implants.

Problems with cochlear implant internal components - there is a chance of a problem occurring with the internal portion of the cochlear implant system after it is implanted. Based on reports from the current cochlear implant manufacturers, this is a rather rare occurrence.

Static electricity - static electricity can potentially damage the electrical components of the implant system or erase programs saved to the speech processor. To prevent it:

- Remove the speech processor while the child is playing on plastic slides or plastic ball pits.
- Avoid contact with the speech processor until you have touched your child. By touching your child before you reach for the speech processor you will ground yourself and avoid passing static electricity to the processor.

Your audiologist may offer other suggestions to protect a speech processor from static electricity.

Cochlear implant and childhood activities - children with cochlear implants can participate in all common childhood activities. The implanted portion of the cochlear implant system is unaffected by running, swimming, or any normal activity. Precautions include:

- Wear a helmet when bicycling, skateboarding or roller-skating to help prevent damage to the internal device in the event of a fall.
- Remove the processor when swimming or engaging in other activities where the external parts could get wet. However, there are water-resistant speech processors, and one manufacturer has a processor that is ‘swimmable’.

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