



Cochlear Implant (CI) Magnet

The purpose of the cochlear (COKE le ar) implant (CI) magnet is to hold the headpiece (coil) in place to transmit sound to the internal device (Picture 1). The entire device has 4 parts: the magnet, headpiece (coil), cable and processor. The CI magnet portion is about the size of a dime.

Before CI surgery, your child will receive medicine to be sure he or she will not feel pain. During surgery, the magnet is inserted just under the scalp, through a slit that is made behind the ear. The area is closed with special stitches that will dissolve by themselves. They do not need to be removed.

Important things to remember

- **It is important to know the magnet strength and to consistently check the magnet site when wearing a cochlear implant (CI).** If this is not closely monitored, the magnet can cause a skin breakdown leading to infection. If this happens, your child may need another surgery to fix the internal device.
- The CI magnet is **not** to be used to hold the external device on the head. The headpiece may fall off often, so you might feel that the magnet is not strong enough. Your audiologist will closely monitor this and decide if a stronger magnet is needed.
- It is normal for the headpiece to fall off if the patient rubs his or her head on a stroller, car seat, or other object. The headpiece will also fall off if a patient is being very active (for instance, running and jumping). However, it is important that you do not increase the magnet strength without asking your child's audiologist.
- If the magnet is too strong, it can cause the skin to break down. This can lead to infection. If the site becomes infected, the skin can break open, exposing the internal device. Then another surgery might be needed to repair the damage (Picture 2).



Picture 1 This is how a normal magnet site looks.



Picture 2 This site shows redness and swelling on the scalp in the shape of the magnet.

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Important things to remember, continued

- If the magnet site becomes infected, the external processor will have to be removed until the site heals. Without the external processor, the patient will not be able to hear until the magnet site heals and it can be worn again. This would require more audiology appointments to reprogram the CI. The magnet site could take days or even months to heal, depending on how severe the skin breakdown is.

Precautions

It is important to check the magnet site at least once every week. If you see any redness or swelling, remove the external processor and contact the audiologist right away. The phone number for the Audiology Department is 614-722-3951.