

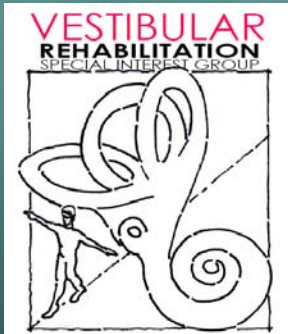
FACT SHEET



Cochlear Implants

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Cochlear Implants and Vestibular Disorders



What is the link between the cochlea and vestibular system?

The vestibular system is a tiny organ located in each inner ear that contributes to a person's balance and allows steady vision during head movements. The cochlea is closely linked to the vestibular system and therefore children who are born with hearing loss might also have vestibular problems. There are some reports of vertigo and temporary loss of balance following cochlear implant surgery which suggests that the vestibular system can be affected on the side of the cochlear implant.

How can I recognize a vestibular problem in my child?

Children with vestibular problems might have poor balance leading to falls, especially during high level motor skills (e.g. hopping, skipping and walking on a balance beam). Babies are typically delayed in learning to sit, stand and walk. Although children rarely complain, they might also have trouble focusing their eyes during head movement (e.g. reading a sign when walking). If the vestibular system is suddenly damaged on one side only, the eyes will beat quickly away from the side of the damage (nystagmus) and your child might complain of vertigo. The nystagmus and vertigo should go away after a few days but the balance problems could remain.

How can a physical therapist help my child with a vestibular problem?

A PT can assess your child's balance and motor skills to determine if he/she is functioning at an age appropriate level. Special tests can be done to screen for vestibular problems. If these tests are abnormal, your child will be referred to a physician for further testing. If problems with balance or motor skills exist, the PT can prescribe exercises. There are also special exercises to help your child learn to see clearly during head movements. The therapist will show you and your child the exercises in the clinic, and then give you exercises to incorporate into your child's daily routine. Research shows that these exercises, if done for at least 12 weeks, can improve motor skills, balance and gaze stability.



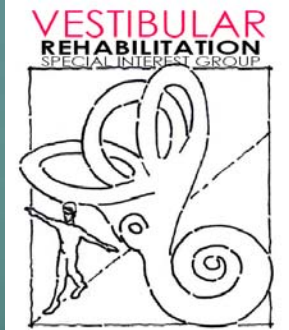
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References:

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