



Cleft Palate and Hearing

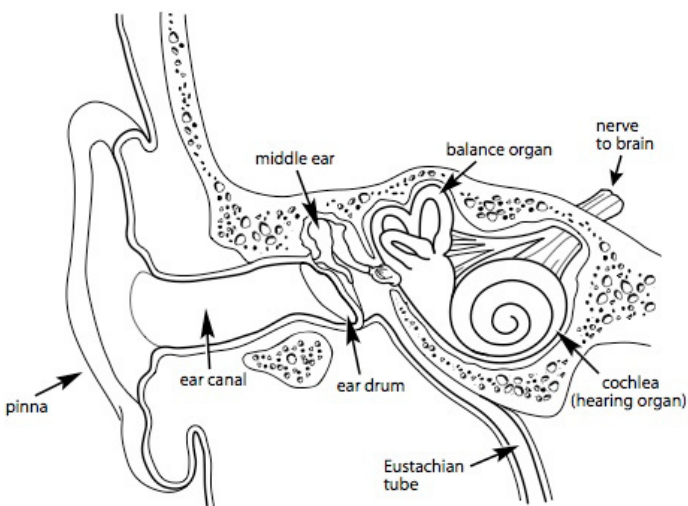
I was told that my baby might have middle ear problems because she or he has a cleft palate. What does this mean?

Many babies with cleft palate have middle ear fluid at birth or in the newborn period. This fluid affects the baby's hearing. By the time babies with a cleft palate are 9 months old and are ready to have their palate repaired, most will have middle ear fluid and temporary hearing loss.

Why does this happen?

The following diagram shows the main parts of the ear: the outer, middle and inner ear. The middle ear is an air-filled space behind the eardrum that contains 3 little bones. The main function of the middle ear is to send sound vibrations to the inner ear (cochlea).

There is a very small tube or "passageway" called the eustachian (pronounced "u-station") tube that connects the middle ear space to the back of the nose and throat. With a cleft palate, some of the muscles that help the eustachian tube to open may not work well.



- ▶ The eustachian tube is usually closed but opens to replace air and equalize air pressure in the middle ear. It is small in young children and can easily become blocked. With a cleft palate, the eustachian tube is often blocked and fluid may build up in the middle ear. Usually it is not painful. Occasionally, fluid in the middle ear becomes infected.
- ▶ Many babies with a cleft palate and middle ear fluid will have surgery to put tiny ventilating tubes (also called pressure equalizing tubes) in the eardrum(s). They drain the fluid and help keep air in the middle ear. Tubes are put in by a Pediatric Otolaryngologist (Ear Nose and Throat doctor) often at the same time as the cleft palate repair surgery. These tubes are temporary and usually fall out in 9-12 months.

How does middle ear fluid affect my baby's hearing?

- ▶ When the middle ear is filled with fluid, the eardrum and the tiny bones in the middle ear can't move well. It is harder for sound to get to the inner ear and sound is softer or muffled. Plug your ears with your fingers to hear what this might sound like.
- ▶ Your baby will have more trouble hearing quiet sounds. Most babies with middle ear fluid will still respond to many sounds at home but might be missing out on quieter sounds.
- ▶ Middle ear fluid often changes. This means that your baby's hearing can be better on some days, and worse on others.

When is my baby's hearing checked?

The BC Early Hearing Program offers hearing screening for all newborns.

What happens if my baby passes the hearing screening?

- ▶ Passing a hearing screening means that your baby is unlikely to have hearing loss and that their middle ears are working well at the time of screening.
- ▶ Because many babies with cleft palate develop middle ear fluid early in life, a more in depth hearing test with an Audiologist (a hearing professional) will be arranged.
- ▶ Your baby's hearing will be regularly tested in early childhood to check for any changes in hearing.

What happens if my baby does not pass the hearing screening?

- ▶ Not passing hearing screening could be an indication of hearing loss or fluid in the middle ears.
- ▶ Your baby will be referred for an in-depth hearing test with an Audiologist (a hearing professional).
- ▶ Attending follow-up appointments is the best way to be SURE about your baby's hearing.

How to encourage early communication with your baby:

Even young babies communicate!

Babies smile, cry, point, and vocalize, to communicate with you. Watch your baby so you can learn what he/she might be trying to communicate. Respond to your baby so that he/she knows you are trying to understand.

Example: Your baby smacks her lips, squirms and looks at the bottle in your hand, indicating she is hungry. You can say something like: "You are hungry! You want some milk, here's your bottle."

Talk with your baby!

Talk with your baby, face to face at a close distance. Talk in clear, simple speech about what your baby is looking at or seems to be interested in. You can talk with your baby when you are changing diapers, feeding, at the grocery store, at bed and bath time - you can talk anytime and about everything you are doing!

Encourage your baby to take turns in the conversation

Having a conversation is like throwing a ball. You wait for the other person to return it to you. Give your baby a turn in the conversation by pausing and waiting.

Lower background noise

Babies have a better chance of learning through listening if there is little or no background noise. Here are some typical sources of noise in a home: television, radio, dishwasher, vacuum, and other conversations happening nearby.

How can I help my child?

- ▶ Call your family doctor if you think your baby has an ear infection. Some signs might be fever, irritability, pain in the ear, or pulling at the ear.
- ▶ Call your Audiologist if you think your child's hearing has changed.
- ▶ If your baby has a hearing loss and ventilating tube surgery is delayed, a hearing aid *may* help. Please check with your Audiologist.

Remember it is important your child has:

- ▶ Regular hearing and middle ear check-ups - contact your Audiologist about a schedule.
- ▶ Regular appointments with a Pediatric Otolaryngologist (Ear Nose and Throat doctor) at least every six to 12 months (six months if ventilating tubes).

Contact Information:

BC Children's Hospital Cleft Palate/ Craniofacial Team:	604-875-3146
BC Children's Hospital Toll Free:	1-888-300-3088
BC Children's Hospital Audiology:	604-875-2112
BC Children's Hospital Ear Nose & Throat:	604-875-2113
Interior Health Cleft Lip/Palate Team:	250-868-7757
Victoria Cleft Lip/Palate Team:	250-519-5390 ext 36329