Conductive Hearing Loss: Effects of Otitis Media and Other Causes of Fluctuating Hearing Loss

Program in Audiology and Communication Sciences
Pediatric Audiology Specialization

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Outline

• What is Conductive Hearing Loss?
  o Effects of Conductive Hearing Loss
  o Common Causes of Conductive Hearing Loss
• Otitis Externa vs. Otitis Media
  o Signs and Symptoms
  o Risk Factors
• Treatment of Conductive Hearing Loss
• Management of Conductive Hearing Loss
What is Conductive Hearing Loss?

- **Conductive hearing loss** results from a problem in the outer or middle ear, making it difficult for sound to reach the inner ear
  - Some conductive hearing loss is treatable by a medical doctor
Common Causes of Conductive Hearing Loss

<table>
<thead>
<tr>
<th>Fluid in the Ear</th>
<th>Uncommon Anatomy</th>
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<tr>
<td>• Watery, thick, or pus-like</td>
<td>• Small or absent outer ear</td>
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<td>• May be draining from the ear</td>
<td>• Closed, narrow, or absent ear canal</td>
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<td>• May be trapped behind the ear drum</td>
<td>• Problems with middle ear bones</td>
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<tr>
<td>• Can be infected</td>
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<table>
<thead>
<tr>
<th>Genetic Syndromes</th>
<th>Ear Canal Blockage</th>
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<tr>
<td>• Down Syndrome</td>
<td>• Build up of ear wax</td>
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<tr>
<td>• Treacher Collins Syndrome</td>
<td>• Small objects or toy pieces</td>
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<tr>
<td>• Goldenhar Syndrome</td>
<td>• Swollen ear canal</td>
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<td>• Etc.</td>
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Effects of Conductive Hearing Loss

- Sounds may seem muffled
- Soft sounds may not be heard
- Some parts of speech may not be heard

If conductive hearing loss is not managed or treated, it could have a negative impact on your child’s speech and language development, learning, and attention.
Otitis Externa vs. Otitis Media

Outer Ear Infection ➔ Otitis Externa
Also called “Swimmer’s Ear”

Middle Ear Infection ➔ Otitis Media
Also called “Ear Ache or Ear Infection”

What is Otitis Externa?

Swelling, irritation, and/or infection occurring in the outer ear

Signs and Symptoms

- Pain
- Redness
- Drainage
- Itching
- Tenderness
- Bad smell
- Hearing loss
Otitis Externa – Risk Factors

- Cuts or scratches on the outer ear
- Frequent swimming or swimming in untreated water

Contact a pediatric Ear Nose and Throat (ENT) doctor and pediatric audiologist to discuss the use of swim plugs or other options to protect against otitis externa.
What is Otitis Media?

Irritation, infection, and/or build up of fluid or pus in the middle ear

- The eustachian tube connects the middle ear to the throat, allowing fluid to drain from the middle ear space

Why do children get ear infections?

Children’s eustachian tubes are still growing. Fluid may not drain well from the middle ear. Fluid build-up causes otitis media.
Otitis Media – Signs and Symptoms

Otitis media can occur in one or both ears.

- Fever
- Crying
- Drainage from ears
- Difficulty sleeping
- Tugging on ears
- Odor from ears
- Hearing loss

Your child may say…

- My ears hurt and are itchy!
- I can’t hear you!
- It sounds like I’m under water!

It is important to remember that some children may not report any or all of these symptoms, but may still have hearing loss caused by otitis media.
Otitis Media – Risk Factors

A child is more at risk of developing an ear infection if he or she is:

- Younger than 6 years old
- Around cigarette smoke
- Spending a lot of time around large groups of children
- Diagnosed with a genetic syndrome or other condition related to conductive hearing loss
Treatment of Conductive Hearing Loss

• Contact your child’s pediatrician or pediatric ENT doctor for medical treatment options
• In addition to seeking medical treatment, contact a pediatric audiologist to discuss ideas for managing your child’s conductive hearing loss

Even after receiving treatment, some children may develop another ear infection. Contact your child’s doctor to discuss treatment plans.
Management of Conductive Hearing Loss

Some ways to help your child overcome his or her conductive hearing loss are:

• Using **amplification** when medical intervention is not effective and upon medical clearance
• Using **communication strategies** when talking to your child
  o Face your child when speaking
  o Get your child’s attention before speaking
  o Use visual cues such as pointing, gesturing, or pictures
  o Seat your child near the talker

For more information on amplification options for your child, visit pacs.wustl.edu/kidshearinghealth/ to view *Pediatric Amplification* materials.
To find a pediatric audiologist near you, please visit one of the links below:

http://webportal.audiology.org/Custom/FindAnAudiologist.aspx

http://www.asha.org/profind/

To find a pediatric ENT near you, please visit the link below:

http://www.entnet.org/content/find-ent