



The first 4 years is the 'sensitive period' for the acquisition of language and speech skills. The language that a child hears during this period shapes the neural networks in the language and speech regions in his brain. What he hears, he learns to process and copy. Anything that interferes with his hearing interferes with his speech and language development.

What happens when your child has a build-up of fluid in his inner ears? A build-up of fluid in the middle ear is called 'otitis media'. In some lucky cases a child may experience otitis media with hearing loss, but in most cases the fluid leads to temporary loss of hearing that will last until the fluid is gone.

How serious is the hearing loss? To learn what speech usually sounds like to a child with otitis media, close up your ears with your fingers or ear plugs and ask another adult to read to you. You will find it very difficult to hear the individual words that the person is reading, especially when she isn't facing you and when there are background noises and other distractions present. You will struggle to hear the first and final consonants in the words and the endings of words, which indicate past tenses or plural forms. In other words, you won't hear the difference between the following: hun and run, back and tat, cat and sat, and play and played. Children often don't hear short and softly spoken words such as 'to', 'and' and 'but'.

What is the influence of this hearing loss in a child's development? Young children have limited language skills to begin with, so they don't know any better and when they cannot hear properly, they don't complain. But this doesn't mean that their inability to hear well doesn't have an influence on them. Children who regularly suffer from this kind of temporary hearing loss find it frustrating, tiring and boring to try to figure out what people are saying and they learn to be content with getting only a general idea of what somebody is trying to say to them. Plainly, it's too much effort; and in many cases impossible; to focus on the detail of what is said. Consequently, the child's brain doesn't get the opportunity to learn how to process and respond to the finer details of language. This very often leads to speech and language delays, problems focusing attention, poor self-esteem, social problems and problems with reading, following instructions and general problems with being educated later on in life.

What are the changes that your child may fall victim to otitis media? Next to the common cold, this is the most common health problem in preschool children. According to a pediatrician who practically deals with otitis media on a daily basis, Dr Vincent Iannelli, 50% of children have had at least one episode by their first birthday. Between 1 and 3 years, 35% will have had repeated episodes. This is staggering when one considers that a child who has 2 episodes per year can lose out on up to 12 months of proper language and speech stimulation during the first 3 years! That's a third of his life!

What causes otitis media? Acute otitis media typically goes along with an acute ear infection, while a second type, called 'otitis media with effusion' (OME) refers to fluid that has built up in the inner ear for another reason: as the result of a cold, allergies or irritants such as cigarette smoke. Both types can occur in one or both ears.

What are the signs? It's relatively easy to detect acute otitis media, as your child will most likely be pulling on his ear or say that his ear is hurting. You may notice fluid draining from the ear and your child is likely to be running a fever. He will also be irritable and sleep poorly.

The fluid that remains after the ear infection has cleared up is much easier to miss since your child will no longer be experiencing any pain and he won't complain. He may however be hearing only bits and pieces of what you're saying for months without either you or your child being aware of what's going on. In the same way, the type of otitis media that results from ordinary colds, allergens and cigarette smoke can easily go undetected. Be alert for one or more of the following symptoms:

- Having difficulty paying attention and following directions
- A delayed response or no response from him when you speak to him
- Saying "huh?" often
- Speaking in a tone of voice that is much louder than usual
- Often turning up sound on a radio, CD or TV
- Being over-active and uncooperative
- Having difficulty keeping balance, running or jumping

Prevention tips:

- Avoid irritants such as cigarette smoke and allergens that causes OME.
- Consider home care or a day care with six or fewer children.
- Wash hands after blowing noses or going to the bathroom and clean toys that have been in a child's mouth before another child plays with them.
- Breastfeeding for even a few weeks makes baby less prone to infections.
- Don't overuse antibiotics since this breeds increasingly resistant bacteria.
- Allow fresh air into the house to help decrease exposure to airborne germs.
- Consult a nurse or doctor for more information about available vaccines.
- Don't put your child to bed with a bottle, as the liquid can leak out and go up the small tube leading to the middle ear, causing otitis media.

Consult a pediatrician or ear-nose and throat specialist when you suspect a middle ear infection. If your child suffers from frequently recurring infections, or chronic fluid in the middle ear, see an audiologist to evaluate the severity of any hearing impairment. Also see a speech and language pathologist to measure your child's speech and language skills and to provide treatment. For more information on how to promote listening, language learning and early literacy skills in your child during episodes of otitis media, please contact the Practica Advisory Service at