Suspected Hearing Impairment in Children

If you notice the following problems in your child, please contact your ear, nose and throat (ENT) specialist or family doctor for further examinations at the earliest opportunity.

- Delayed speech development
- Failure to concentrate in class
- Slow response to instructions in class or during recreation, or responds only after observing other classmates’ reactions
- Social withdrawal; refuses to attend gatherings or to make friends
- Often has trouble understanding others during group discussions
- Takes a longer time than fellow classmates to learn something new
- Often stares intently at people’s facial expression when they speak

Common symptoms can often be treated with medication or surgery. If hearing loss persists after treatment, the patient can consider fitting a hearing aid.
Understanding Your Hearing

Hearing is an invaluable and indispensable part of our daily lives. It helps us to build positive interpersonal relationships and enhance our ability to learn and work. If our hearing is damaged, it may severely affect our lives and even our physical and psychological health.

In addition, children learn through listening to others. Impaired hearing may affect learning and cause problems in speech development, thereby hindering the child’s growth.

Hearing Loss

Hearing loss may be congenital or acquired. Congenital hearing loss may be hereditary, or a result of various causes before or during birth. Acquired hearing loss may arise at any stage of life, mostly from illness or trauma. A healthy auditory nervous system can detect sounds under 25 decibels (the unit for measuring sound). One is considered to be hearing impaired if he/she can only detect sounds above 25 decibels.

Hearing loss can be classified into five degrees of severity according to the range of decibels detected:

<table>
<thead>
<tr>
<th>Degree of Hearing Loss</th>
<th>Range of Decibels Detected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td>26-40</td>
</tr>
<tr>
<td>Moderate</td>
<td>41-55</td>
</tr>
<tr>
<td>Moderate Severe</td>
<td>56-70</td>
</tr>
<tr>
<td>Severe</td>
<td>71-90</td>
</tr>
<tr>
<td>Profound</td>
<td>91 or above</td>
</tr>
</tbody>
</table>

Hearing loss can be categorised into three types according to the affected auditory pathway:

<table>
<thead>
<tr>
<th>Type</th>
<th>Auditory Part Affected</th>
<th>Possible Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Conductive Hearing Loss</td>
<td>Middle and/or outer ear</td>
<td>Congenital malformation of external auditory canal, cerumen accumulation, perforated eardrum, otitis media or externa, injured middle-ear bones, etc.</td>
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<tr>
<td>2. Sensorineural Hearing Loss</td>
<td>Inner ear hearing hair cells and/or auditory nerves</td>
<td>Hypoxia or severe jaundice at birth, advanced age degeneration, ototoxic drug, prolonged exposure to loud noise, etc.</td>
</tr>
<tr>
<td>3. Mixed Hearing Loss</td>
<td>Inner ear hearing hair cells and/or auditory nerves and middle or outer ear</td>
<td>A combination of conductive and sensorineural hearing loss</td>
</tr>
</tbody>
</table>

Signs of Hearing Loss

- Difficulty distinguishing sources of sounds
- Delayed response to relatively quiet speech
- Often turns head to one side when listening, or focuses intently on the facial expression or mouth movements of the speaker
- Gives irrelevant answers when asked a question
- Confuses words that sound alike
- Often asks people to repeat what they said
- Finds it more difficult than others to understand speech in a noisy setting
- Tends to turn up the volume on the television
- Trouble communicating over the phone