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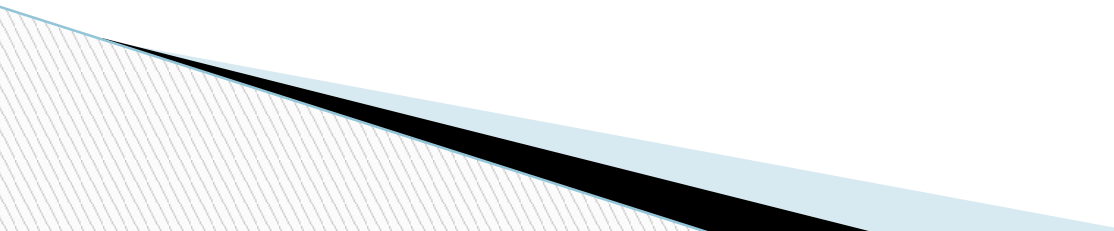
Unit 27

Common Problems of the Ears

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Objectives

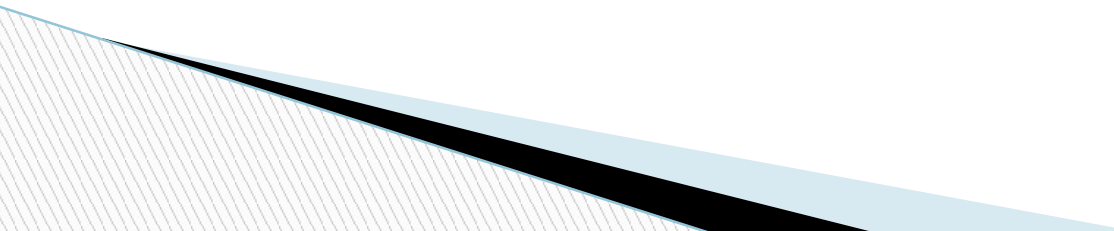
- ❑ **Recognize symptoms of common ear infections**
 - ❑ **Treat simple problems of the ear yourself**
 - ❑ **Recognize when the child has to be referred to the PHC/doctor**
 - ❑ **Plan some activities to convey to the children the importance of the sense of hearing**
 - ❑ **Explain to the parents how to prevent ear infections in children**
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Structure of the Ear

The ear has three parts— outer, middle and inner ear.

The outer ear is the part of the ear that is on the outside of the head, with the earhole. This leads to a narrow passage or ‘canal’, at the end of which is a circular membrane called the ‘drum’.

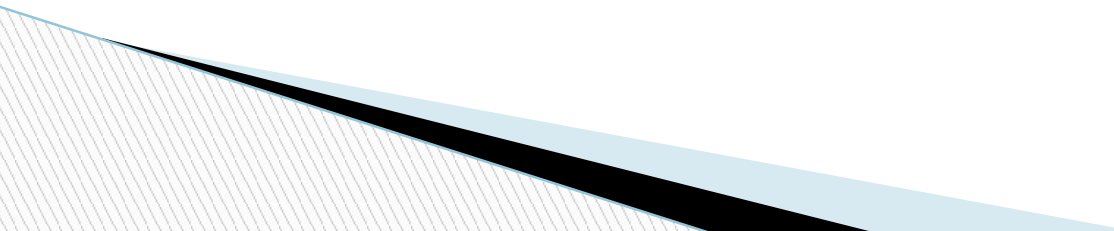
The middle ear extends from the drum or ‘tympanum’ to the inner ear, which is demarcated by three small bones. These bones vibrate with the movement of air caused by sound. The vibrations are conveyed from the brain by a nerve and we hear sound.



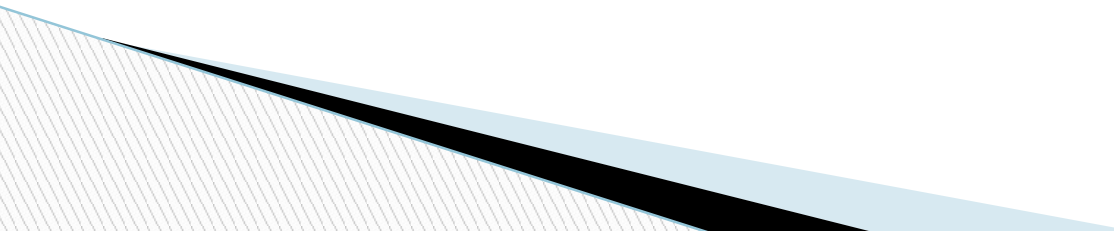
The body produces wax in the middle ear which protects the drum from very loud sounds.

Prolonged exposure to very loud sounds leads to deafness, due to the continuous vibrations of the bones in the middle ear.

The inner ear contains three ‘semi-circular canals’ which help in keeping our balance, and contains the ‘nerve’ which carries sound to the brain.

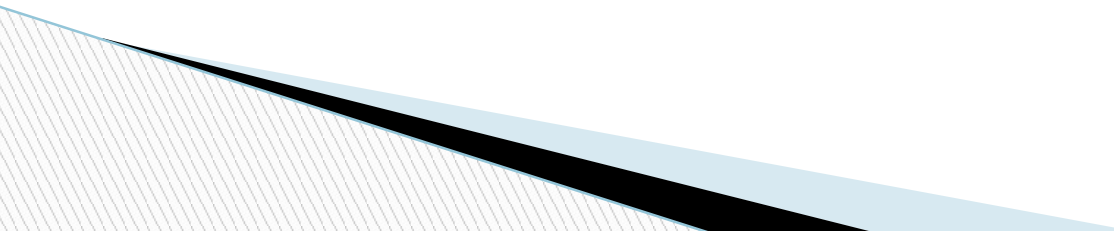


Examining the Ear

- **As the canal from the outer ear to the drum is curved, it is difficult to see the drum without an instrument called the ‘otoscope’.**
 - **This is an electronic torch, with a small bulb, which shines light into the ear.**
 - **While children are still young, it is important to find out if they can hear.**
 - **A child who cannot hear is not mentally retarded. She is as intelligent as any other child and can learn to speak very well, if the right help to improve her hearing is given.**
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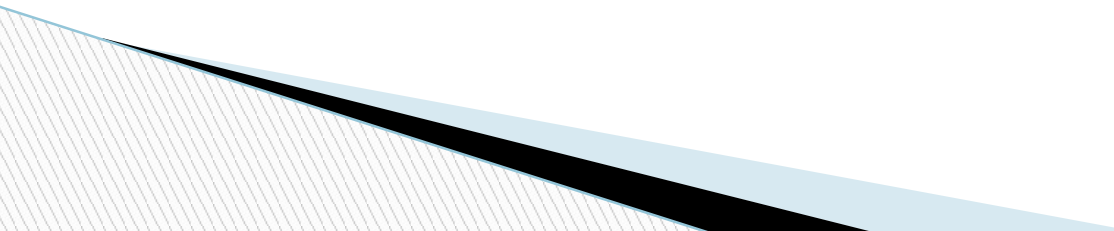
Common Problems of the Ear

The following are three common problems of the ear that children suffer from:

1. Earache
 2. Ear discharge
 3. Deafness
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1. Earache

Causes:

- A. Pain in the ear is usually due to septic infection in the middle ear, as a result of infection in the upper respiratory parts. The onset may be sudden and severe. This is called “acute” infection.**
- The bacteria travel from the throat, through the Eustachian tube, to the middle ear. The inner lining becomes swollen and pus collects in the cavity. This causes severe pain and fever. This condition is called ‘otitis media’.**
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Treatment:

Never try to treat this condition at home. Refer to a doctor.

Acute ear infection is not treated, it leads to complications.

B. Sometime the wax produced in the ear becomes hard and impacted. This can cause pain and slight deafness.

Treatment:

- Use a soft swab for cleaning the outer part of the ear. The swab can be made by rolling some cotton on one end of a match stick.**
- However, do not put the swab inside the ear. If the wax has been accumulating for a long time, it would be very hard and difficult to remove it in this way. The child will need to go to a doctor.**

C. Flies, mosquitoes or other insects go into the middle ear and cause acute discomfort or pain, if they sting.

If a foreign body enters the ear, it causes pain.

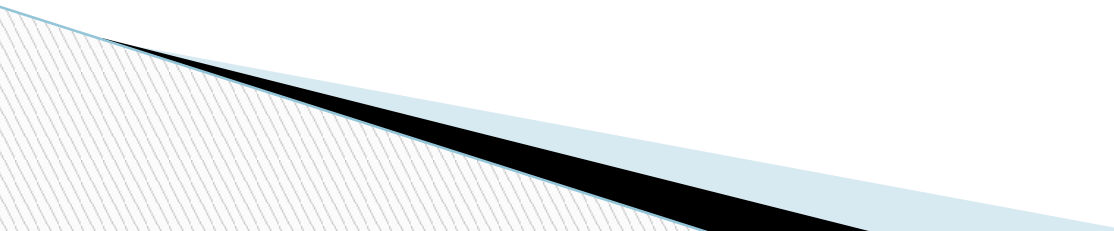
Children often put small beads or stones in their ears, and these can get stuck inside the canal. They can even get infected and form pus, leading to middle ear infection.

Treatment:

**These conditions are painful and difficult to handle.
Refer to a doctor.**

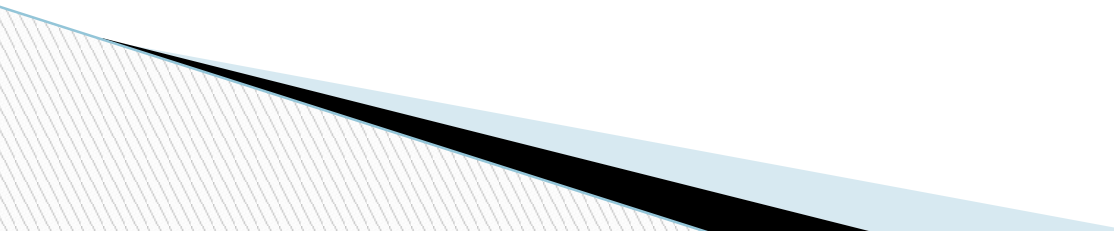


D. Babies who are teething— i.e., cutting their molars— may have earache.

- **They will be seen to be rubbing their ears. This is due to referred pain from the jaw.**
 - **When the teeth are erupting, they press on the nerves that go to the middle or inner ear. So the baby has pain in the ear and keeps rubbing it.**
 - **This is called “referred pain”, as it is not an earache due to infection in the ear, but is referred from the jaw.**
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2. Ear Discharge

This may be due to any of the following causes.

- A. When there is infection in the middle ear (otitis media), pus collects in the canal. This causes acute pain.**
- The drum swells up and finally bursts. This is called perforation.**
 - Through the hole in the drum, the pus comes out of the ear, there is “discharge” and the pain is relieved.**
 - But the hole in the drum affects hearing and results in deafness.**
 - Therefore, ear discharge with no pain is more serious than acute pain in the ear.**
 - The former means that the tympanum has burst.**
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Treatment:

- **Treat otitis media before the drum perforates. Refer the child to the doctor.**
- **In the case of both acute and chronic otitis media, the doctor will prescribe antibiotics to treat the infection.**
- **The doctor may also prescribe antibiotic ear drops.**

B. Foreign bodies in the ear, if not removed, result in infection and formation of pus.

This leads to the same process as above leading to perforation.

Treatment:

Refer the child to the doctor



- ❑ **C. Water entering the middle ear (while swimming or bathing). Fungus may grow and infect the middle ear**

Treatment :

- ❑ **Refer the child to the doctor**

Prevention :

- ❑ **Clean the ear thoroughly after the bath using a soft swab**

**NEVER TRY TO CLEAN THE EAR WITH A PIN OR
MATCHSTICK AS THIS MAY INJURE THE DRUM.**

3. Deafness

Causes

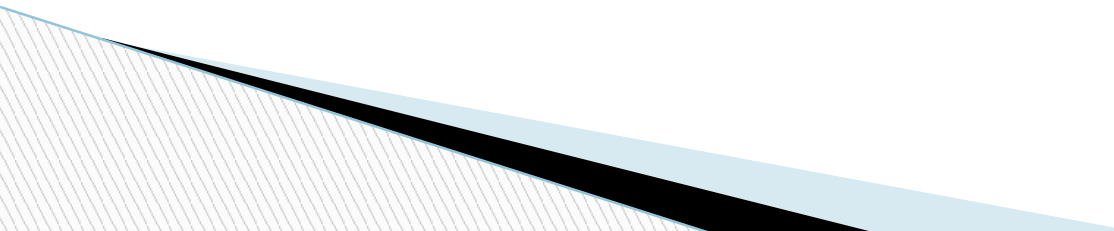
- **Birth defects**
- **Some illnesses, like meningitis, can result in deafness.**
- **Temporary deafness can be the result of**
 - **impacted wax in the ear**
 - **foreign body**
 - **swelling of the eustachian tube in a common cold**
 - **perforation of the drum.**

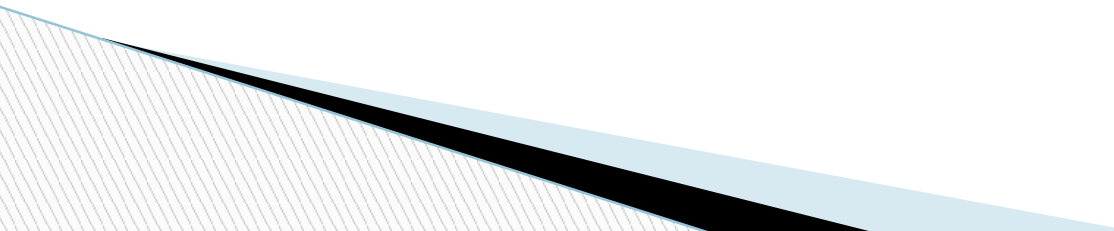
Treatment: Temporary deafness will go away once the underlying cause is treated.

A child who is born deaf or has become deaf due to some illness, should be referred to a doctor. The doctor will test the hearing and suggest what has to be done next.

Prevention of Ear Infections

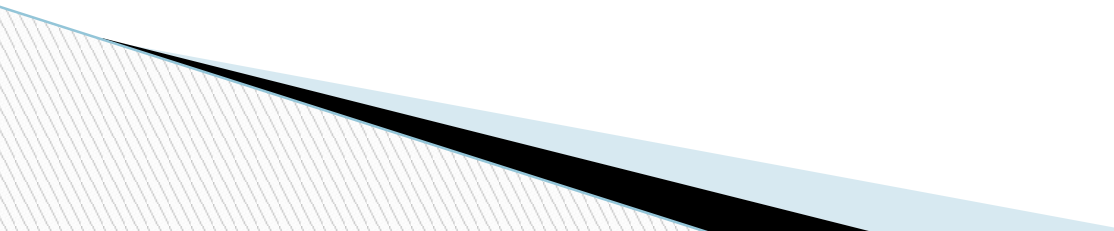
The following aspects, if kept in mind, can help to prevent many infections of the ear.

- a) Treat colds and sore throats immediately. Do not let the infection spread to the middle ear.**
 - b) If there is earache with fever, treat with antibiotics before the drum perforates. For this, refer the child to a doctor.**
 - c) Clean the baby's ears with a swab after every bath. Accumulated water may lead to ear infection.**
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- d) Mothers are advised to feed infants while sitting and not lying down as eustachian tube in infants is shorter and straighter. Milk may then enter it and infection may result.**
 - e) Do not let older children with middle ear infection go swimming. Water gets in the middle ear and will result in spread of the infection or growth of fungus.**
 - f) Prevent insects from hovering around the baby's ears by keeping the outer ear clean.**
 - g) See that the space behind the outer ear is clean.**
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Suggested Activities to help Children Understand the Importance of Hearing

The following are a couple of games you can organize with the children at your centre.

- 1) Chinese Whispers: Ask the children to stand in a circle. Whisper a sentence to the first child and ask her to whisper it to the ear of the next child, who in turn will repeat it to the next child and so on. The last child says aloud what she heard. Very often, this will be quite different from the original sentence. The children enjoy this game and also understand the meaning of talking clearly.**
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2) Mime Games:

Give a complicated message and ask a child to act and, in this way, communicate the message to the rest. The children will soon realize the advantage and importance of communication through hearing.



Thank You