

Otitis Media

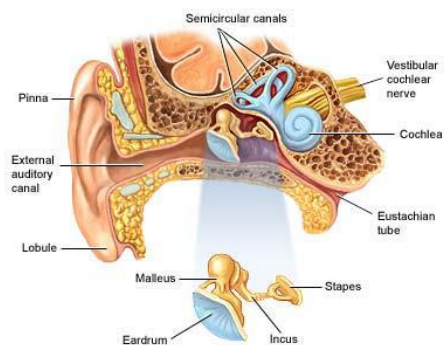
Definition

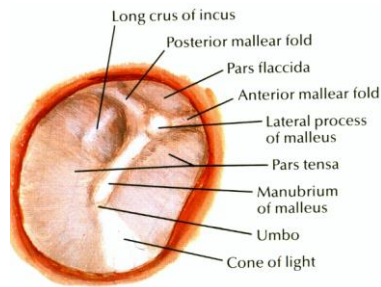
Otitis media is an inflammation and/or infection of the middle ear.

Causes and Risks

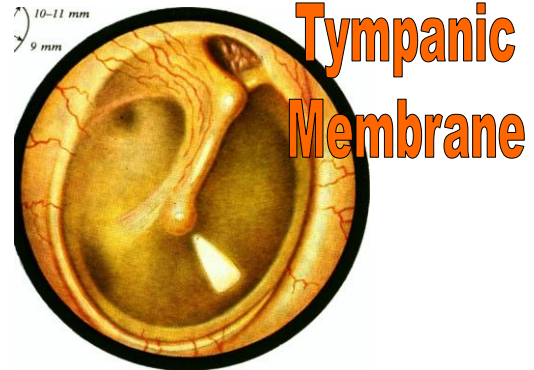
- Acute otitis media occurs when there is bacterial or viral infection of the fluid of the middle ear, which causes production of fluid or pus.
- This may be accompanied by bleeding in the middle ear.
- Inflammation of the ear may occur when there is a collection of sterile fluid in the ear. This may be caused by overproduction of fluid by the structures in the middle ear. It may also be caused by blockage of the eustachian tube.
- The presence of excess fluid causes the ear to become irritated and inflamed.

- Pressure from fluids associated with ear infection may cause the eardrum to rupture.
- A ruptured eardrum can also result in ear infection by allowing bacteria or viruses direct entry to the middle ear.
- Ear infections are most common following respiratory infections, or if the sinuses or eustachian tube are blocked.





Right tympanic membrane (eardrum)
viewed through speculum



- Ear infections are common.
- They are more common in children because their eustachian tubes are shorter, narrower, and more horizontal.
- Risk factors include
 - recent illness of any type
 - crowded or unsanitary living conditions
 - genetic factors (susceptibility of the ear to infection may run in families).
 - high altitude
 - cold climate
 - bottle feeding of infants (allowing fluid to pool in the throat near the eustachian tube).

Prevention

- Always hold infants in a sitting position during feeding.

For children and adults who have a history of frequent ear infections GP may recommend

- nasal sprays
- preventive antibiotics
- decongestants

Symptoms

- Note: Symptoms may occur spontaneously, or after a cold or other upper respiratory infection.
- ear discomfort or pain
 - earache may be severe
 - fullness, pressure in the ear
 - in children, pulling at the ear
- drainage from the ear
- hearing loss in the affected ear
- fever
- chills
- irritability
- feeling of general illness
- nausea, vomiting
- diarrhoea

- Additional symptoms that may be associated with this disease:

- throat, sore
- neck pain
- nasal discharge
- nasal congestion
- joint pain
- headache
- ear noise or buzzing

Signs and Tests

- An ear inspection may show dullness, redness, air bubbles, or fluid behind the eardrum.
- The eardrum may bulge out or retract inward, or it may show perforation.
- An examination and culture of fluid may show blood, pus, and bacteria.

Treatment

- The goal of treatment is cure of the infection.
- Nasal sprays, nose drops, oral decongestants
- Ear drops may be prescribed to relieve pain.
- OTC antipyretic and analgesic medications
- Oral corticosteroids may occasionally be prescribed to reduce inflammation.
- Cotton wool plug
- Myringotomy may occasionally be needed to relieve pressure and allow drainage. Gromits may be inserted.
- Surgery to remove the adenoids may prevent them from blocking the eustachian tube.

Prognosis

- Otitis media is curable with treatment but may recur. It is not life threatening but may be quite painful.

Complications

- ruptured or perforated eardrum
- chronic ear infection
- loss of hearing, temporary or permanent
- enlarged adenoids
- mastoiditis
- meningitis
- temporary and minor hearing loss
- Permanent hearing loss is rare, but the risk increases the more infections a child has



