

## Otitis Media Assessment

Otitis media is an infection of the middle ear caused by a virus or bacteria and is characterized by the presence of fluid in the middle ear, along with symptoms of inflammation. This condition most commonly occurs in children due to the shorter, straighter, and narrower nature of the eustachian tube in childhood. Signs and symptoms of otitis media include red, bulging tympanic membrane, ear pain, and fever. Children with an upper respiratory infection or those regularly exposed to smoke are at an increased risk of developing an ear infection. Conductive hearing loss may occur in chronic cases of otitis media.



PLAY PICMONIC

### Red or Bulging Tympanic Membrane

#### Red Bulge in Tin-pan Membrane

Assessment of the ear with an otoscope will reveal a red, bulging tympanic membrane due to inflammation.

### Ear Pain

#### Pain-bolt

Patients with otitis media will experience inner ear pain or otalgia. Pain may also be referred down the side of the patient's face, near the temporomandibular joint.

### Pulling at Ear

#### Baby Pulling Ear

Infants and young children may be seen pulling on their affected ear when experiencing pain. They may roll their head from side to side. Loss of appetite may also occur, as sucking and chewing can aggravate inner ear pain.

### Fever

#### Fever-beaver

Because otitis media is caused by an infection, patients will present with a fever. Patients with otitis media may also experience vomiting and diarrhea.

### Upper Respiratory Infection

#### Upper Respiratory Tract Bacteria

Patients who have an upper respiratory infection are at an increased risk of developing a middle ear infection.

## Considerations

### More Common in Young Children

#### Young Children

Otitis media occurs more commonly in children than adults, due to difference in the anatomy of the ear in childhood.

### Eustachian Tube Narrower

#### Ear-radio-station Tube Narrowed

Middle ear infections are more common in children due to the shorter, straighter, and narrower nature of the eustachian tube in the child.

## **Conductive Hearing Loss**

### **Musical-Conductor with Plugged-ears**

Conductive hearing loss may occur in chronic cases of otitis media. Hearing loss may be due to chronic inflammation, perforation of the tympanic membrane, or damage to the anatomy of the inner ear.

## **Smoking Increases Risk**

### **Up-arrow Cigarette**

Exposure to passive smoke increases bacterial adherence in the respiratory tract and can suppress the immune system and decrease the effectiveness of protective cilia. Therefore, a child who lives with one or more people who smoke is at an increased risk of developing otitis media.