

# Acute Otitis Media

## BACKGROUND

- Acute otitis media (AOM) is inflammation of the middle ear cavity with fluid collection (effusion) or discharge (otorrhoea)
- Most cases are viral in origin and self-limiting with adequate analgesia
- Expect spontaneous resolution in 3-7 days
- Complications are rare

## PATHOGENESIS

- Preceding viral infection
- Bacterial colonization  
(*H. influenzae*, *S. pneumoniae*, *S. pyogenes*, *M. catarrhalis*)

## COMPLICATIONS

- Recurrence
- Perforation & discharge
- Temporary conductive hearing loss

## RARE COMPLICATIONS

- Acute suppurative labyrinthitis
- Facial nerve palsies
- Acute mastoiditis
- Venous sinus thrombosis
- Meningitis
- Subdural or extradural abscess

## HISTORY

- Fever
- Ear pain/pulling ear
- Otorrhoea
- Ataxia
- Lethargy/irritability/sleep disturbance
- Protracted & severe crying

## EXAMINATION

- Vital signs and full physical examination to outrule other causes of fever/irritability
- Examine child in parent's arms
- Visualize the eardrum with auroscope and appropriately sized tip

## INVESTIGATIONS

- Acute otitis media is a clinical diagnosis and no investigations are required

## TREATMENT

1. Analgesia
  - Regular oral analgesia (paracetamol and ibuprofen)
2. Antibiotics
  - No antibiotic treatment or delayed antibiotic prescription and advise treatment if no improvement after 3 days
  - First line antibiotic choice: oral amoxicillin for 5 days
  - Recurrence or failure to respond: Co-amoxiclav or clarithromycin

## TAKE HOME MESSAGES

- Very common and often over-treated
- Complications rare
- Regular pain relief vital
- No role for antihistamines, decongestants or oral corticosteroids
- Caution use of Antibiotics/ear drops

## ACUTELY DRAINING EAR

- Usually indicates perforated tympanic membrane
- Need adequate oral pain relief
- Oral antibiotics, not very effective unless swab directed. Consider topical ofloxacin eardrops topically (not ototoxic)
- Re-evaluate after 48-72 hours
- Watch for mastoiditis, Bell's palsy, intracranial extension

## OTITIS MEDIA WITH EFFUSION

- Serous otitis/'glue ear'
- Fluid in middle ear without signs or symptoms of infection
- May persist for up to 3 months following AOM
- May lead to transient conductive hearing loss
- Some children will require grommets

## REFERRAL

- More than 4 episodes of AOM in 6 months
- Complications of AOM
- Persistent effusion beyond 3 months (particularly in children over 3 years of age with speech & language, developmental or behavioural problems)