

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 will resolve spontaneously in 10-14 days with adequate analgesia

RISK FACTORS

- Attending crèche
- First AOM before 6 months
- Not breast fed
- Passive smoking
- Food allergies
- Cleft palate
- Down syndrome
- Recurrent URTIs

PATHOGENESIS

- Preceding viral infection → Eustachian tube swelling → Bacterial colonization (Strep/Staph/Moraxella)

COMPLICATIONS

- Perforation & discharge
- Conductive hearing loss
- Acute suppurative labyrinthitis
- Facial nerve palsies
- Acute mastoiditis
- Intracranial spread of infection
 - ✓ Venous sinus thrombosis
 - ✓ Meningitis
 - ✓ Subdural or extradural abscess

HISTORY

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

EXAMINATION

- Examine child in parent's arms
- Use a well-maintained auroscope
- Visualize the eardrum

INVESTIGATIONS

- Acute otitis media is a clinical diagnosis and no investigations are required
- Tympanocentesis is not routinely performed

TREATMENT

- Do not prescribe antibiotics as initial treatment
- Provide delayed antibiotic prescription and advise treatment if no improvement after 3 days (first line antibiotic choice = amoxicillin)
- Pain relief very important
- No role for decongestants

TAKE HOME MESSAGES

- Very common condition
- Often over-diagnosed
- Pain relief vital
- Delay antibiotics unless discharging ear
- Refer to ENT if > 4 episodes AOM in 6 months or if serous otitis media over 3 years old with hearing loss

REFERRAL

- More than 4 episodes of AOM in 6 months
- Complications of AOM
- Persistent serous otitis media in children over 3 years of age with speech & language, developmental or behavioural problems

SEROUS OTITIS MEDIA

- Also known as "glue ear"
- Many children will have glue ear for up to 3 months following AOM
- Prolonged course in Down syndrome and cleft palate
- May lead to conductive hearing loss
- Some children will require grommets

ACUTELY DRAINING EAR

- Usually indicates perforated tympanic membrane
- Need adequate pain relief
- Oral antibiotics
- Re-evaluate after 48-72 hours
- Watch for mastoiditis, Bell's palsy, intracranial extension

REFERENCES

- SIGN Guideline No. 66 Feb 2003: *Diagnosis and management of childhood otitis media in primary care*