

Otitis media

Key facts

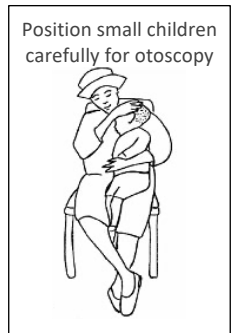
- Common cause of fever in children
- Most cases of otitis media will get better within 3d without antibiotics, but it can take up to 7d
- Antibiotics have minimal impact on recurrence, short-term hearing loss or eardrum perforation
- Managing pain and giving information are very important

Patient assessment

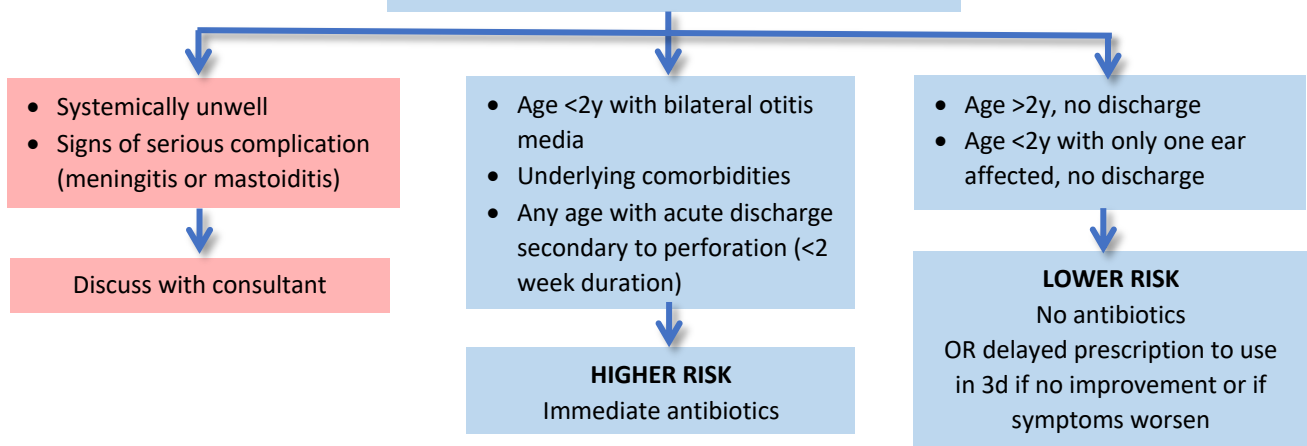
- Ear examination is an important part of examination to look for source of fever in young children; ensure good positioning of small children.
- **Inspection** – position of the ear ; **Palpation** – mastoid, tragus, lymph nodes



- **Otoscopy** – Start with the less painful ear. Gently pull the pinna upwards and backwards in adults, straight backwards in small children. The otoscope should be held in your right hand for the patient's right ear and vice versa for the left ear. Hold the otoscope like a pencil and rest your hand against the patient's cheek for stability. This will prevent damage to the ear if there is sudden movement. Advance the otoscope under direct vision. Be gentle with the otoscope and ensure movements are slow and considered otherwise you will cause discomfort.



TREATMENT OF ACUTE OTITIS MEDIA



	DRUG	DOSE	DURATION
<u>First line</u>	Amoxicillin	1 to 11 months: 125mg TID 1 to 4 years: 250mg TID Adults and child >5y: 500mg TID	5-7 days
If penicillin allergy/intolerance	Erythromycin	1 to 23 months: 250mg BD 2-7 years: 500mg BD Adult and child >8y: 500-1000mg BD	
<u>Second line</u> (worsening symptoms on first-line taken for at least 2-3d)	Amoxicillin/Clavulanic acid	1 to 11 months: 0.25ml/kg of 156mg susp TID 1 to 5 years: 5ml of 156mg suspension TID 6 to 11 years: 5ml of 250/62 suspension TID OR 375mg tablet TID 12 to 17 years: 375mg TID (625mg if severe) Adult: 625mg TID	5-7 days

Other aspects of management

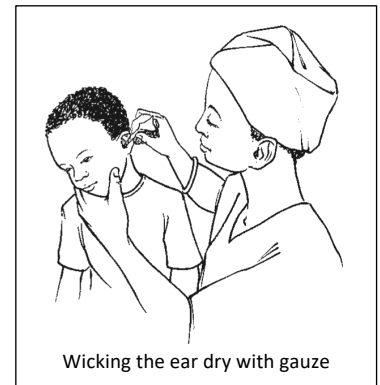
- Discuss findings and likely duration of illness
- Self-care – regular analgesia
- Safety-net – seek medical attention if red flag symptoms or if symptoms ongoing beyond expected time-frame
- Useful patient information at: <https://nairobiclinic.com/ear-infections-acute-otitis-media-in-children/>
- Do not recommend decongestants or antihistamines – no evidence of benefit
- If discharge – very important to keep the ear dry – review in 2 weeks to check tympanic membrane

How to do a 'delayed prescription of antibiotics'

Write a paper prescription (add expiry date 5-10 days time), explain that antibiotics are not required at present and that we expect the infection to get better on its own, but incase symptoms continue/worsen, they can fill the prescription at a pharmacy after a predetermined period (e.g. 3d)

Chronic otitis media with perforation (chronic ear discharge; chronic suppurative otitis media)

- History:** Ear discharge for >2 weeks, often on and off. Not usually with a fever or with pain when a chronic perforation.
- Examination:** Not very painful, ear canal not inflamed, pus visible +/- perforation of the tympanic membrane (this may not be visible if pus++)
- Treatment:**
1. If a large perforation seen, advise referral to ENT
 2. If perforation not obvious or ENT referral not possible, advise to keep the ear dry:
 - Show the carer how to wick the ear with a gauze
 - Prescribe gauze
 - Recommend that they clean the ear three times each day until there is no pus
 - Explain that they must not put anything into the ear apart from the gauze
 - Explain not to get the ears wet at all with bathing or washing
 3. Ciprofloxacin drops: 1-2 drops twice daily for 2 weeks; oral antibiotics are not recommended
 4. Review after 2 weeks, or sooner if problems
- Follow up:** If ongoing problems recommend ENT review
If referral not possible - advise continued wicking with clean gauze (check technique), consider swab for culture, switch to gentamicin drops (for pseudomonas cover): 1 drop twice daily for 1-2 weeks; once ear is dry only use antibiotic drops for flare-ups and continue to avoid getting ear wet



References

<https://list.essentialmeds.org/?indication=403>

Nairobi ENT Clinic: <https://nairobientclinic.com/ear-infections-acute-otitis-media-in-children/> accessed 8.11.23

Up-To-Date accessed 16/2/23

NICE 2022; NG91

Pocketbook of hospital care for children, WHO, 2013