Acute otitis media – Emergency management in children – Flowchart

Child presents to ED with symptoms suggestive of acute otitis media (AOM)

Assessment (including vital signs and otoscopy)

Otoscopy findings suggest AOM (Box A)

AOM evident with fever ≥ 39°C, vomiting and lethargy?

Yes

Treatment
• antibiotics
• analgesia

Discharge, GP review in 1-2 days. Consider admission if very unwell

No

Otoscopy findings suggest AOM (Box A)

Box A: AOM otoscopy findings
Tympanic membrane is:
• bulging
• red, white or pale yellow
Redness alone is not suggestive of AOM

Box B: OME otoscopy findings
Tympanic membrane is:
• retracted or in the neutral position
• amber or blue
A fluid level or bubbles may be seen behind the tympanic membrane

Meet criteria for antibiotics? (Box C)

Yes

Consider antibiotics

Education re antibiotics
- 60% resolve by 2 days without antibiotics
- side effects
- Consider providing antibiotic script for use if pain > 2 days

Discharge GP review in 7-10 days

No

Consider otitis media with effusion (OME) diagnosis (Box B)

• Consider ENT referral if > 6 week history of:
  - effusion or perforation
  - hearing impairment

Consider antibiotics

Meet criteria for antibiotics? (Box C)

No

Discharge GP review in 7-10 days

Yes

Consider antibiotics

Discharge GP review in 7-10 days

Consider providing antibiotic script for use if pain > 2 days

Discharge

Follow up as appropriate

Box C: Consider antibiotic therapy if:
• age < 6 months
• age < 2 years with bilateral AOM
• symptoms > 48 hours
• severe symptoms
  (fever > 39°C and moderate to severe otalgia)
• evidence of perforation
  (purulent otorrhoea or perforation visualised)
• at higher risk of complications (such as CSOM or mastoiditis) including:
  - Indigenous and Torres Strait Islander
  - immunocompromised
  - uncertain access to follow-up

Consider seeking senior emergency/paediatric advice as per local practices

For more information refer to CHQ-GDL-60000 – Acute otitis media – Emergency management in children
Acute otitis media – Emergency management in children – Medications

<table>
<thead>
<tr>
<th>Analgesic</th>
<th>Dose</th>
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<tbody>
<tr>
<td>Paracetamol (oral)</td>
<td>Age over three months: 15 mg/kg/dose (maximum 1 g) every four hours,</td>
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<td>maximum four doses in twenty-four hours</td>
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<tr>
<td>Ibuprofen (oral)</td>
<td>Age over three months: 10 mg/kg/dose (maximum 400 mg) every six to eight</td>
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<td>hours, maximum three doses in twenty-four hours</td>
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<tr>
<td>Oxycodone (oral)</td>
<td>0.1 mg/kg/dose (maximum 10 mg) orally every four hours when required</td>
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Antibiotic guidelines

Clinicians working in Townsville, Cairns and Gold Coast Hospital and Health Services should follow their local paediatric empirical antimicrobial therapy guidelines. Clinicians elsewhere in Queensland should follow the Children’s Health Queensland paediatric antimicrobial prescribing guidelines until the results of microbiological investigations are available.

Links:
- Cairns (access via QH intranet)
- Children’s Health Queensland
- Gold Coast
- Townsville (access via QH intranet)