

Diagnosis and Treatment of AOM in Children

Summary of the Alberta Clinical Practice Guideline for Acute Otitis Media

- Etiology**
- *Streptococcus pneumoniae* (40%), nontypeable *Haemophilus influenzae* (25%), *Moraxella catarrhalis* (10%)
- Diagnosis**
- **It is critical to differentiate between myringitis, otitis media with effusion (OME), and AOM**
 - Otoscopy: bulging, inflamed eardrum, OR
 - Pneumatocopy: eardrum with acute inflammation **and** decreased mobility
- General Management**
- Analgesics/antipyretics
- Antibiotic Therapy**
- High dose amoxicillin if recent (< 3 months) antibiotic exposure and/or daycare centre attendance, or recurrent AOM: 6 weeks to 3 months apart.
 - Duration: 5 days; 10 days if child less than 24 months old, has perforated eardrum, or recurrent AOM

1st Line Agents	Dose*
Amoxicillin Standard Dose High Dose	40 mg/kg/day PO div tid for 5 days 90 mg/kg/day PO div bid-tid for 5 days
Beta-lactam Allergic Azithromycin or Clarithromycin	10 mg/kg/day PO 1st day then 5mg/kg PO daily for 4 days 15 mg/kg/PO div bid for 5 days
Non-type I beta-lactam allergy/anaphylaxis Cefuroxime axetil or Cefprozil**	30 mg/kg day PO div bid for 5 days 30 mg/kg day PO div bid for 5 days
2nd Line Agents	
Failure of Amoxicillin Amoxicillin-clavulanate or	90mg (based on amoxicillin)/kg/day PO div bid for 10 days (use amoxicillin-clavulanate 7:1 formulation)
Cefuroxime axetil or Cefprozil**	30mg/kg/day PO div tid for 10 days 30mg/kg/day PO div bid for 10 days
Beta-lactam Allergy Azithromycin or Clarithromycin	10 mg/kg/day PO 1st day then 5mg/kg PO daily for 4 days 15 mg/kg/PO div bid for 5 days

* Maximum dose should not exceed adult dose

** Compared to cefuroxime, cefprozil has better taste but inferior coverage of *Haemophilus spp* and penicillin intermediate *S. pneumoniae*

Antibiotics NOT Recommended

ANTIBIOTIC PROPHYLAXIS IS NO LONGER RECOMMENDED FOR RECURRENT AOM

- Cephalexin, cefaclor, cefixime, ceftriaxone, clindamycin, erythromycin, quinolones

Follow-up

- Non-responders: reassess at 48 - 72 hours
- Routine follow-up on completion of therapy in asymptomatic patients is **NOT** required
- Follow-up 3 months post AOM episode is recommended to assess for persistent OME, which may lead to hearing loss

