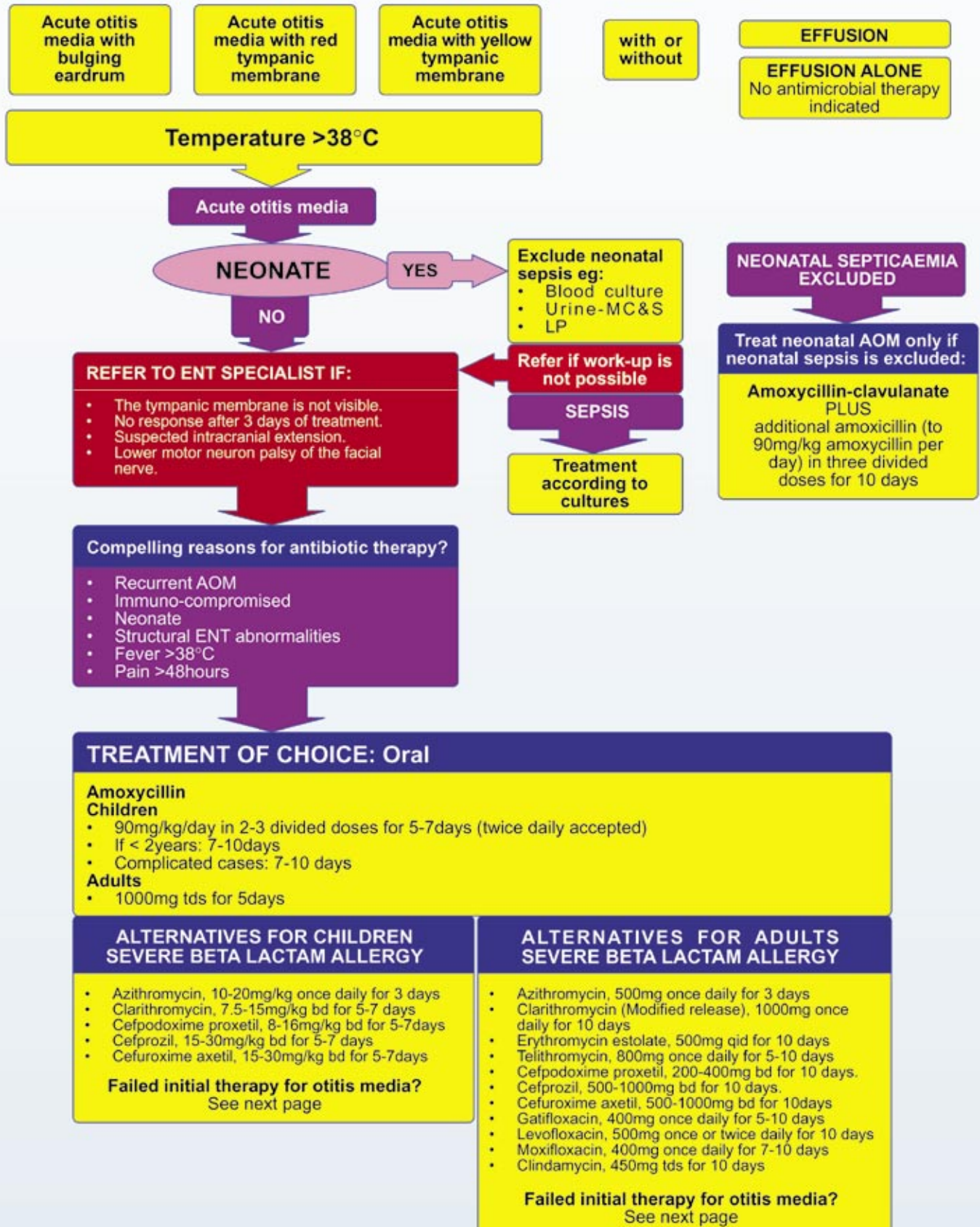


Otitis media symptoms



Failed initial therapy for otitis media

Identify the reason(s) for failed initial therapy:

1. Check for complications. Refer if necessary.
2. Check compliance (dose and duration).
3. Check recent previous antibiotic exposure.
4. Check for risk factors for intermediate or high level resistant *S. Pneumoniae* OR risk factors for a beta-lactamase producing organism: *H. Influenzae*
5. In cases of clinical failure (e.g. persistent fever) after 72 hours of appropriate, compliant initial antibiotic therapy, consider referral to an otorhinolaryngologist for tympanocentesis and MEF culture. This is of relevance in areas with a high prevalence of antibiotic-resistant *S. pneumoniae*, as is the case for the majority of major urban centres in South Africa, particularly in the private.

A. RISK FACTORS FOR INTERMEDIATE/HIGH LEVEL RESISTANT *S.PNEUMONIAE* INFECTIONS:

- Child is 2 years old.
- Child is in a day care centre
- Child is a sibling of a day care attendee.
- Prior AOM in past 6 months.
- Antibiotics in the past 3 months

B. RISK FACTORS FOR BETA-LACTAMASE PRODUCING *H. INFLUENZAE* INFECTIONS :

- Immunocompromised patient
- Neonate

ALTERNATIVE ANTIBIOTIC CHOICES

FAILED INITIAL THERAPY: GENERAL

CHILDREN

- Amoxicillin-clavulanate, plus additional amoxicillin (to a total dose of amoxicillin of 90mg/kg/day) divided into 2 or 3 doses for 5-7 days for failed initial therapy with amoxicillin alone
- Ceftriaxone, IVI or IMI, 50-75mg/kg once daily for 3 days. This is also recommended in the case of isolates of known high-level antibiotic resistance and in severe presentations, e.g. threatened mastoiditis and preferably in consultation with an otorhinolaryngologist.

ADULTS

- Amoxicillin-clavulanate, 1g twice daily plus amoxicillin 500mg twice daily for 10 days for failed initial therapy with amoxicillin alone †
- Respiratory fluoroquinolones:
 - Gatifloxacin, 400mg once daily for 5-10 days
 - Levofloxacin, 500mg once or twice daily for 10 days
 - Moxifloxacin, 400mg once daily for 7-10 days
- Telithromycin, 800 mg once daily for 5-10 days
- Ceftriaxone, IVI or IMI, 1-2g once daily for 3-5 days. Ceftriaxone or the respiratory fluoroquinolones may also be used as first line therapy in severe initial presentations e.g. periorbital oedema and preferably in consultation with an otorhinolaryngologist

CONSIDER BETA-LACTAMASE-STABLE ANTIBIOTICS IF RISK FACTORS ARE PRESENT FOR BETA-LACTAMASE PRODUCING ORGANISM(S)

CHILDREN

- Amoxicillin-clavulanate, plus additional amoxicillin (to 90mg/kg amoxicillin per day in three divided doses for 5-7 days)
- Cefpodoxime proxetil, 8-16mg bd for 5-7 days
- Cefprozil, 15-30mg/kg bd for 5-7 days
- Cefuroxime axetil, 15-30mg/kg bd for 5-7 days

ADULTS

- Amoxicillin-clavulanate, 1000mg bd plus additional amoxicillin, 500mg bd for 10 days †
- Cefpodoxime proxetil, 200-400mg bd for 10 days*
- Cefprozil, 500mg-1000mg bd for 10 days*
- Cefuroxime axetil, 500mg-1000 mg bd for 10 days*
- The higher dosages of cephalosporins recommended would cover for most pneumococcal isolates of intermediate resistance to penicillin, but not necessarily for pneumococcal isolates with high-level resistance. The particular choice of cephalosporins would depend on physician or patient preference, availability and cost.

† Subsequent to the recent publication of the recommendations for the antibiotic treatment of upper respiratory tract infections in SAMJ (2004), a new slow release formulation of amoxicillin-clavulanate (2000mg SR bd) was licensed for use in South Africa. This formulation would be a suitable replacement for the previously recommended amoxicillin-clavulanate and additional amoxicillin, formulation.

Disclaimer: These recommendations are published for educational purposes only. The recommendations are based on currently available scientific evidence together with the consensus opinion of the authors