Guidelines for Management of Otitis Media

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The recommendations made here have been based on deliberations during the National Committee for Rational Treatment of Otitis Media (NACROM 2004), commissioned for Centre for Otitis Media Research (CORE), India.

BASIC CONCEPTS

1. Acute otitis media: The rapid onset of signs and symptoms of inflammation of middle ear.
   Symptoms include otalgia, irritability, insomnia, anorexia
   Signs include fever, otorrhea, full or bulging opaque TM, impaired TM mobility, TN erythema

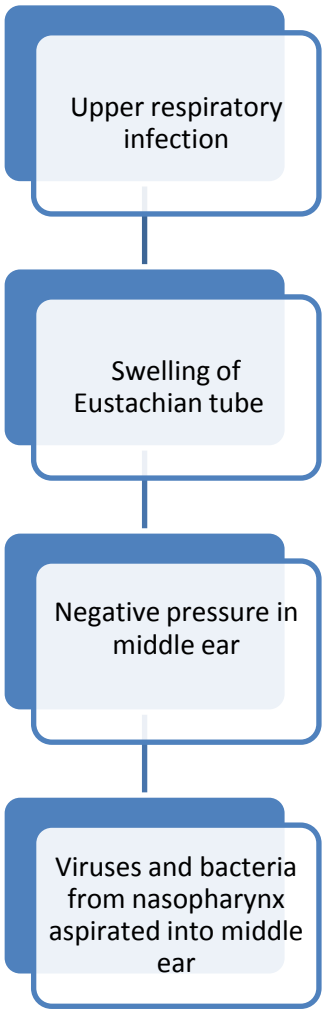
2. Recurrent AOM : Three or more well documented and separate episodes of AOM in the past 6months, or ≥4 well documented and separate AOM episodes in the past 1 year with ≥1 in the past 6months.

3. Otitis media with effusion: The presence of fluid in the middle ear without signs or symptoms of ear infection

4. Chronic otitis media with effusion: OME persisting for ≥3 months from the date of onset(if known) or from date of diagnosis (if onset is unknown)

Signs and symptoms	Acute Otitis media	OM with Middle ear effusion
Earache, fever, irritability	Present	Absent
Fluid in middle ear	Present	Present
Hearing loss	Present	Usually present
Runny ears with pus	May be present	absent

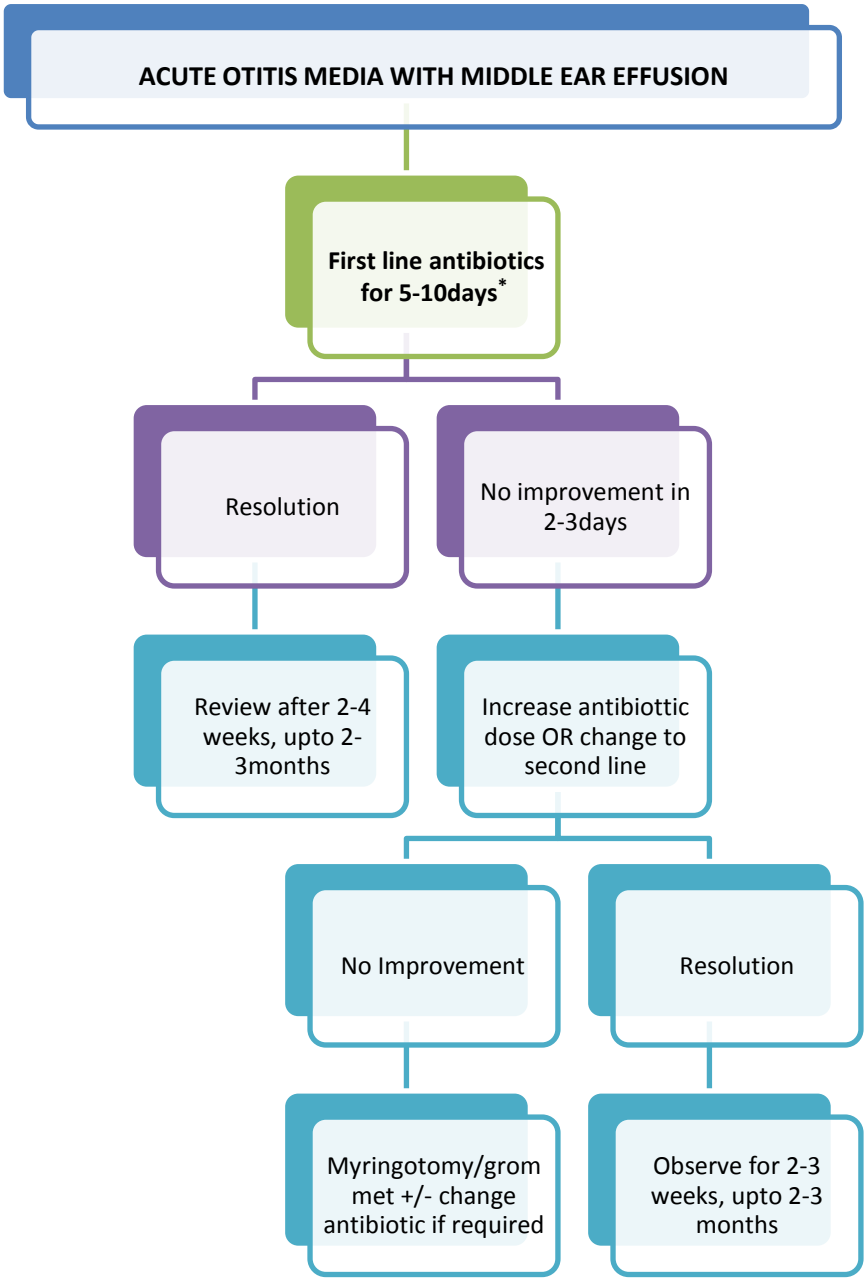
Sequence of clinical events in Acute Otitis Media



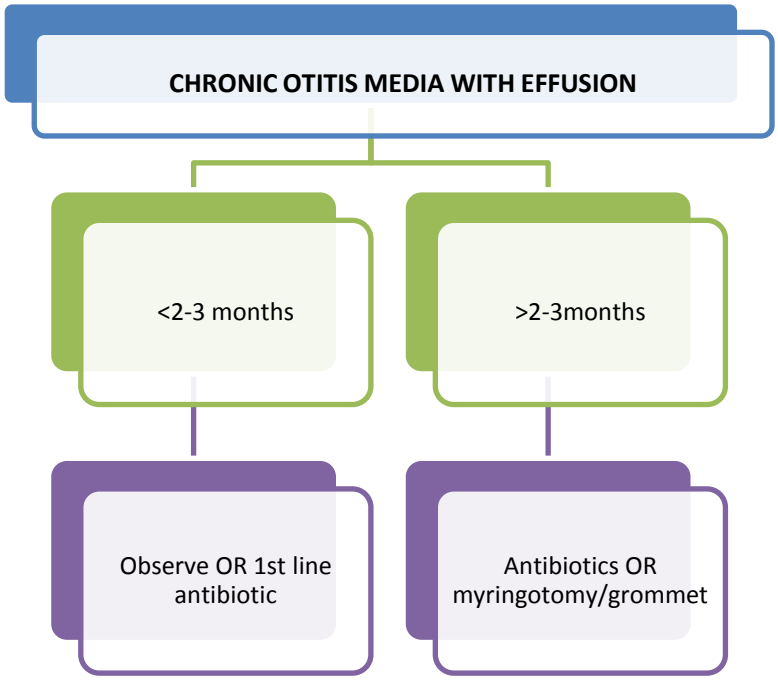
Ensuring accurate diagnosis is the cornerstone of appropriate therapy for Otitis Media. This is established by

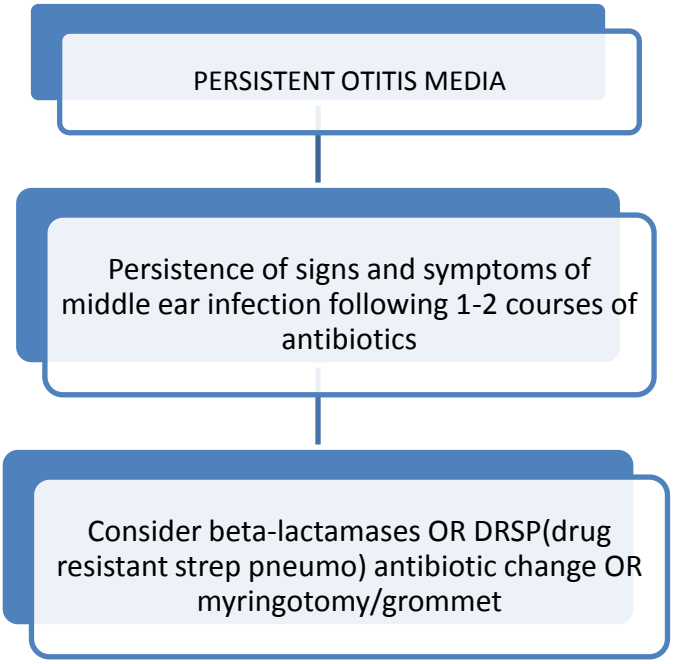
1. History: Ear pain, preceding URTI, fever
2. Findings: Appearance of drum – full/bulging, opaque, congested, presence of air bubbles, otorrhea
3. Pneumatic otoscopy
4. Impedance Audiometry
5. Tympanoscentesis

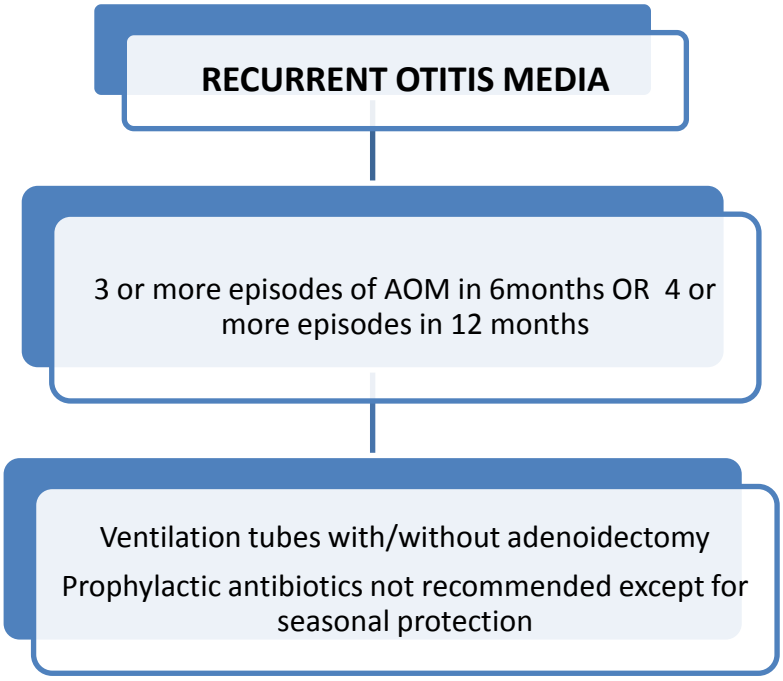
ALGORITHM FOR MANANGEMENT OF OTITIS MEDIA



* - Option of not giving antibiotics to a patient with acute otits media can be exercised in children over age2. (Except in those patients who have severe otalgia, high fever, bulging drum and uncertain diagnosis. Uncertain diagnosis to be considered in situations where the eardrum cannot be visualized due to impacted wax, canal edema etc or in an uncooperative patient.)


CHRONIC OTITIS MEDIA WITH EFFUSION
<2-3 months
>2-3months
Observe OR 1st line antibiotic
Antibiotics OR myringotomy/grommet


PERSISTENT OTITIS MEDIA
Persistence of signs and symptoms of middle ear infection following 1-2 courses of antibiotics
Consider beta-lactamases OR DRSP(drug resistant strep pneumo) antibiotic change OR myringotomy/grommet



For the optimum management of Acute Otitis Media, it is important to remember that if there is no improvement in symptoms after 2-3 days of treatment, then –

Option 1

Continue current regimen at higher dosage for 2-3 more days

Option 2

Change to another antimicrobial that provides better coverage of suspected bacterial organism (consider beta-lactamase producer/penicillin resistance), base empirical therapy on bacterial resistance pattern.

Option 3

When patient is toxic, have high fever and lethargy, then do a myringotomy and culture. Culture directed antibiotics should then be given.

General guidelines for management

- Presence of MEE for 2-3 months after acute otitis media is natural. Do not prescribe antimicrobials unless patient develops recurrent symptoms
- Prophylactic antibiotic for recurrent otitis media should be the exception than the rule. Consider myringotomy/grommet +/- adenoidectomy to prevent drug resistance
- Ensure correct diagnosis of AOM to prevent unnecessary treatment
- Ensure patient compliance
- Use second line antibiotics as first line, if patient has already received antibiotics
- Amoxicillin is the first line drug for otits media. Whenever there is suspicion of beta lactamase producers (incidence of which is increasing), coamoxyclav becomes the drug of choice. The incidence of DRSP(drug resistant Streptococcus pneumonae) is not high enough to warrant empirical treatment with higher antibiotics like quinolones.
  The recommendations made here have been based on deliberations during National committee for Rational treatment of Otitis Media (NACROM 2004), commissioned for Center of Otitis Media Research (CORE), India.

  The above recommendations are due for revision by NACROM 2, to be held in July 2015. The revised guidelines will be updated soon thereafter.