# OTITIS MEDIA, ACUTE PURULENT

<table>
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<th>DEFINITION</th>
<th>Symptomatic bacterial infection of the middle ear. Most of these infections are self-limited, but prolonged infection requires antibiotic therapy.</th>
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| SUBJECTIVE | Must include recent onset of at least one of the following symptoms:  
1. Severe, deep, throbbing ear pain.  
2. Decreased hearing.  
3. Sensation that ears are plugged.  
4. Distinct otalgia (discomfort clearly referable to the ear(s) that results in interference with or precludes normal activity).  
May include:  
1. History of recent upper respiratory infection.  
2. Fever.  
3. Discharge from ear. |
| OBJECTIVE  | Must include signs of middle ear infection including at least one of the following:  
1. Bulging of the tympanic membrane.  
2. Limited or absent mobility of the tympanic membrane.  
3. Air-fluid level behind the tympanic membrane.  
5. Purulent material in canal.  
May include:  
1. Loss of normal light reflex.  
2. Temperature > 102º F.  
3. Edematous nasal mucosa.  
4. Perforation of tympanic membrane with purulent exudate.  
5. Enlarged pre and post-auricular nodes.  
| LABORATORY | Not usually indicated. |
| ASSESSMENT | Otitis media, acute purulent presumed bacterial infection. |
2. Treatment with antibiotics is not mandatory, but if the patient is symptomatic, select one of the following oral antibiotics:  
a. Erythromycin estolate 500 mg 4 times daily for 5-7 days.  
b. Azithromycin 500 mg daily for 3 days.  
c. Clarithromycin (sustained release) 250 mg to 500 mg every 12 hours for 5 to 7 days.  
3. Instruct patient to return in 24-48 hours if persistent fever, pain or meningeal symptoms or in 48 hours if no improvement. |
| PATIENT EDUCATION | 1. Application of a warm compress or heating pad set on low to the area around the ear 10 to 15 minutes per hour may provide some symptom relief.  
2. Antihistamines and decongestants are ineffective.  
3. Avoid exposure to tobacco smoke. |
| REFER to MD/ER | 1. Tympanic membrane is not visualized.  
|               | 2. Any perforation of tympanic membrane or suspected intracranial extension.  
|               | 3. Patient complains of vertigo.  
|               | 4. Any signs of meningeal irritation, e.g., history of convulsions, nuchal rigidity, severe headaches.  
|               | 5. Any soft tissue swelling around the ear (rule out mastoiditis).  
|               | 6. Any abnormal neurological signs, especially imbalance, which may indicate vestibular involvement.  
|               | 7. Symptoms do not diminish within 48 to 72 hours, so reassessment needed.  
|               | 8. Temperature >102º F persists after 24 hours of treatment.  