### Empiric Antibiotic Treatment

Intranasal corticosteroids are recommended as adjunctive in patients with hx of allergic rhinitis

- **PREVENTION**
  - Prior hospitalization in past 5 days
  - Attend daycare
  - Immunocompromised

- **INITIATE treatment**
  - Consider wait-and-see-prescription

**Watchful waiting**

- Consider delaying the initiation of ABX for any severity of symptoms
- Initiate treatment if condition fails to improve by 3 days in children or 7 days in adults
- Consider wait and see prescription

**EXCEPTIONS to Watchful Waiting**

- Patients with chronic rhinosinusitis or recurrent acute rhinosinusitis in chronic conditions such as:
  - Asthma
  - Cystic Fibrosis
  - Ciliary dyskinesia
  - Immunocompromised state

**Risk for Antibiotic Resistance**

- Prior antibiotics in past 30 days
- Age <2 or >65 years
- Comorbidities

**Symptomatic Relief Medications—Adjunctive Treatment**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Adults</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nasal decongestant</td>
<td>Restricted to ENT: Oxymetazoline (Afrin®) 1-3 sprays each nostril daily for up to 1 week if used concomitantly with intranasal steroid (or purchase OTC)</td>
<td></td>
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<tr>
<td>Pain/Fever</td>
<td>Ibuprofen 400-800mg PO q8hr PRN pain/fever (max 3200mg/day)</td>
<td>Ibuprofen age &gt;6 months old: 10mg/kg PO q8hr PRN pain/fever (max 3200mg/day)</td>
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<td></td>
<td>Acetaminophen 325-650mg PO q4hr PRN pain/fever (max 4000mg/day)</td>
<td>Acetaminophen 15mg/kg PO q4hr PRN pain/fever (max 4000mg/day)</td>
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<tr>
<td></td>
<td>Fluticasone propionate 2 sprays each nostril daily</td>
<td>Fluticasone propionate (4-4yrs) 1 spray each nostril daily</td>
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<tr>
<td></td>
<td>Sodium Chloride 0.9% Inhalation bullets (or purchase OTC)</td>
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<tr>
<td></td>
<td>Sinus Rinse Starter Kit Available from ENT or PCC (or purchase OTC)</td>
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<tr>
<td></td>
<td>Intranasal saline irrigation</td>
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</tbody>
</table>

**Initial Management**

**Duration**

- PCN allergic alternatives
- Pain/Fever
- Nasal decongestant

**Antibiotic Selection**

<table>
<thead>
<tr>
<th>Empiric</th>
<th>Antibiotic Treatment</th>
<th>Duration</th>
<th>Adults</th>
<th>Children</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Line Treatment</td>
<td>I. Amoxicillin/clavulanate 875mg/125mg PO BID</td>
<td>5 days</td>
<td>I. Amoxicillin/clavulanate 22.5mg/kg PO BID (max 875mg/dose)</td>
<td>10 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PCN allergic alternatives</td>
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<tr>
<td></td>
<td>I. Clindamycin 300mg PO TID PLUS Cefpodoxime 200mg PO BID</td>
<td>5 days</td>
<td>I. Clindamycin 10mg/kg PO TID (max 300mg/dose) PLUS Cefdinir 14mg/kg/day (max 600mg/day)</td>
<td>10 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>II. Levofloxacin 500mg PO q24hr</td>
<td>5 days</td>
<td>II. Levofloxacin (max 500mg/day) 6 months to 5 years old: 10mg/kg PO BID 5 to 16 years of age: 10mg/kg PO q24hr</td>
<td>10 days</td>
<td></td>
</tr>
<tr>
<td>At risk for Antibiotic Resistance</td>
<td>I. Amoxicillin/clavulanate 875mg/125mg PO BID PLUS Amoxicillin 1gm PO BID</td>
<td>5 days</td>
<td>I. Amoxicillin/clavulanate (ES) 600mg/42.5mg/5mL 45mg/kg PO BID (max 875mg/dose)</td>
<td>10 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>II. Levofloxacin 500mg PO q24hr</td>
<td>5 days</td>
<td>II. Clindamycin 10mg/kg PO TID (max 300mg/dose) PLUS Cefdinir 14mg/kg/day (max 600mg/day)</td>
<td>10 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>III. Levofloxacin 500mg PO q24hr</td>
<td>5 days</td>
<td>III. Levofloxacin (max 500mg/day) 6 months to 5 years old: 10mg/kg PO BID 5 to 16 years of age: 8-10mg/kg/day PO Q 24 Hours</td>
<td>10 days</td>
<td></td>
</tr>
</tbody>
</table>

**Follow up**

- **Worse or NO improvement at 7 days:**
  - Reassess and confirm diagnosis, exclude other causes, and detect complications
  - If watch and wait management, initiate 1<sup>st</sup> line treatment
  - If 1<sup>st</sup> line tx, consider treatment from “At risk for ABX resistance” above

- **If NO improvement from 2<sup>nd</sup> antibiotic:**
  - Refer to specialist; consider CT sinuses

- **Antibiotic Selection**
  - Approximately 15% of H. influenza isolates produce beta-lactamases and are resistant to amoxicillin
  - Macrolides are NOT recommended for empiric therapy due to high rates of resistance among S. pneumoniae
  - Sulfamethoxazole/Trimethoprim is NOT recommended for empiric therapy due to high rates of resistance to S. pneumoniae and H. influenzae
  - Routine coverage for MRSA is NOT recommended for initial empiric therapy.
  - Endoscopic-guided culture and/or empiric Staph aureus coverage (bacitracin or doxycycline) should be considered in patients who have had RECENT SINUS SURGERY.
  - Oral decongestants or antihistamines are NOT recommended as adjunctive tx for acute sinusitis.

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