ANMC Adult & Pediatric Ambulatory Care Guideline for Acute Sinusitis

Signs & Symptoms	Cardinal Criteria for Bacterial Sinusitis
• Persistent & not improving (≥10 days) • Symptoms worsen within 10 days *after* initial improvement (double worsening)	Must have **purulent nasal discharge** **PLUS** **Nasal obstruction** AND/OR **facial pain/pressure/fullness**

Initial Management

Watchful waiting	EXCEPTIONS to Watchful Waiting
• Consider delaying the initiation of antibiotics 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	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
- Prior hospitalization in past 5 days
- Attend daycare
- Immunocompromised
- Moderate to severe or prolonged signs and symptoms
- Failure of prior antibiotic therapy
- Frontal or sphenoidal sinusitis

Symptomatic Relief Medications—Adjunctive Treatment

	Adults	Children
FIRST LINE: Intranasal saline irrigation	**Sinus Rinse starter kit** Available from ENT or PCC (or purchase OTC)	**Sodium Chloride 0.9% Inhalation** bullets (or purchase OTC)
Intranasal corticosteroids are recommended as adjunctive in patients with hx of allergic rhinitis	**Fluticasone proprionate** 2 sprays each nostril daily	**Fluticasone proprionate (≥4yrs)** 1 spray each nostril daily **Triamcinolone acetonide (2-4yrs)** 1 spray each nostril daily
Pain/Fever	**Ibuprofen** 400-800mg PO q8hr PRN pain/fever (max 3200mg/day) **Acetaminophen** 325-650mg PO q4hr PRN pain/fever (max 4000mg/day)	**Ibuprofen** *age >6 months old:* 10mg/kg PO q8hr PRN pain/fever (max 3200mg/day) **Acetaminophen** 15mg/kg PO q4hr PRN pain/fever (max 4000mg/day)
Nasal decongestant	*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)	

Antibiotic Selection

Empiric Antibiotic Treatment	Adults	Duration	Children	Duration
1st Line Treatment	I. **Amoxicillin/clavulanate** 875mg/125mg PO BID	5 days	I. **Amoxicillin/clavulanate** 22.5mg/kg PO BID (max 875mg/dose)	10 days
PCN allergic alternatives	I. **Clindamycin** 300mg PO TID **PLUS** **Cefpodoxime** 200mg PO BID II. **Levofloxacin** 500mg PO q24hr	5 days	I. **Clindamycin** 10mg/kg PO TID (max 300mg/dose) **PLUS** **Cefdinir** 14mg/kg/day (max 600mg/day) 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	10 days
At risk for Antibiotic Resistance→ (See section above for criteria)	I. **Amoxicillin/clavulanate** 875mg/125mg PO BID **PLUS** **Amoxicillin** 1gm PO BID II. **Levofloxacin** 500mg PO q24hr	5 days	I. **Amoxicillin/clavulanate (ES) 600mg/42.5mg/5mL** 45mg/kg PO BID (max 875mg/dose) II. **Clindamycin** 10mg/kg PO TID (max 300mg/dose) **PLUS** **Cefdinir** 14mg/kg/day (max 600mg/day) 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	10 days

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 1st line treatment
- If 1st line therapy, consider treatment from *"At risk for antibiotic resistance"* above

If NO improvement from 2nd antibiotic:
Refer to specialist; consider CT sinuses

NOTES

- Approximately 15% of *H. influenzae* 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 (bactrim or doxycycline) should be considered in patients who have had **RECENT SINUS SURGERY**.
- **Oral** decongestants or antihistamines are **NOT** recommended as adjunctive treatment for acute sinusitis.

(1) Otolaryngology—Head and Neck Surgery 152 (2S), Rosenfeld et. al. April 2015. (2) Pediatric ABRS Guideline 1-18yrs; Pediatrics 2013;132 (3)IDSA Guideline for ABRS, CID, Chow et. al ,March 2012. (4) Meltzer Am J Rhinol Allergy 2013.

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