2016 ANMC Adult & Pediatric Ambulatory 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 ABX for any severity of symptoms - Initiate tx if condition fails to improve by 3 days in children or 7 days in adults - Consider wait-and-see-prescription (WASP) - 1st line tx should be initiated if above criteria are met	Patients with Chronic Rhinosinusitis or recurrent Acute Rhinosinusitis in multiple chronic conditions such as: - Asthma - Cystic Fibrosis - Ciliary dyskinesia - Immunocompromised state

Risk for Antibiotic Resistance

- Prior Abx in past 30 days
- Prior hospitalization in past 5 days
- Moderate to severe or prolonged signs and symptoms
- Age <2 or >65
- Attend daycare
- Failure of prior ABX tx
- Comorbidities
- Immunocompromised
- 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 Q 8 Hours PRN pain/fever **Acetaminophen** 325-650mg PO Q 4 Hours PRN pain/fever (max 3250mg/day)	**Ibuprofen** *age > 6 months old:* 5-10mg/kg/dose Q 8 Hours PRN pain/fever **Acetaminophen** 10-15mg/kg/dose PO Q 4 Hours PRN pain/fever
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 Tx	I. **Amoxicillin/clavulanate** 875mg/125mg PO BID	5 days	I. **Amoxicillin/clavulanate:** 45mg/kg/day PO divided BID	10 days
PCN allergic alternatives	I. **Clindamycin** 300mg PO TID plus **Cefpodoxime** 200mg PO BID II. **Levofloxacin** 500mg PO Q 24 Hours	5 days	I. **Clindamycin** 30-40mg/kg/day PO TID plus **Cefdinir** 14mg/kg/day II. **Levofloxacin** [max dose of 500mg] *6 months to 5 years old:* 16-20mg/kg/day PO divided BID *5 to 16 years of age:* 8-10mg/kg/day PO Q 24 Hours	10 days
At risk for ABX Resistance → (See section above for criteria)	I. **Amoxicillin/clavulanate** 875mg/125mg PO BID plus **Amoxicillin** 1gm PO BID II. **Levofloxacin** 500mg PO Q 24 Hours	5 days	I. **Amoxicillin/clavulanate (ES) 600mg/42.5mg/5mL:** 90mg/kg/day PO divided BID II. **Clindamycin** 30-40mg/kg/day PO TID plus **Cefdinir** 14mg/kg/day III. **Levofloxacin** [max dose of 500mg] *6 months to 5 years old*:16-20mg/kg/day PO divided BID *5 to 16 years of age*: 8-10mg/kg/day PO Q 24 Hours	10 days

****Fluoroquinolone FDA Safety Alert**: *Disabling & potentially permanent adverse effects outweigh benefit in sinusitis. Only use levofloxacin when no other alternatives exist.*

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 tx, consider treatment from *"At risk for ABX resistance"* above

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

NOTES

****Saline nasal irrigations are safe & effective for symptom relief & do NOT lead to resistance.**
- Approximately ¼ 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. influenza*
- Routine coverage for MRSA is **NOT** recommended for initial empiric therapy.
  - **Endoscopic-guided culture** and/or empiric *Staph aureus* coverage (bactrim or doxycycline) should, however, be considered in patients who have had **RECENT SINUS SURGERY**.
- **Oral** decongestants or antihistamines are **NOT** recommended as adjunctive tx 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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