ADULT ACUTE RHINOSINUSITIS CLINICAL DECISION AID

Definition[1]: *purulent nasal discharge AND nasal obstruction AND facial pain, pressure or both lasting <4 weeks in duration (this aid does NOT apply to chronic sinusitis).*

Acute **viral** rhinosinusitis (AVRS) accounts for **90-98%** of sinusitis presentations[1].

Acute **bacterial** rhinosinusitis (ABRS) complicates **2-10%** of cases.

Clinical judgement in each situation is needed to determine if the Decision Aid applies

RESERVE ANTIBIOTICS FOR 3 SCENARIOS*

Severe	Severe symptoms at presentation
Worsening	Worsening course in the first 5 days
Persistent	Persistent sinusitis symptoms beyond 7-10 days without improvement, or getting worse

A *delayed antibiotic prescription* can be considered where clinical uncertainty or other situational factors present
(e.g. Other clinical concern by physician, long weekend, patient circumstance such as trip.)

Employ *Safety-Netting*: Consider advising patients to notify office if they start Rx, or if symptoms worsen, as clinical re-assessment may be needed.

* these scenarios suggest ABRS>AVRS[1]; x-ray or CT not warranted for uncomplicated ABRS[2,4]

RECOMMENDED ANTIBIOTICS[1-3]

Amoxicillin [2,3] 500 mg po tid x 5-7 days OR Amoxicillin-clavulanate[1] 875 mg po bid x 5-7 days**

**(2nd line OR if increased resistance risk – eg. antibiotics in last 3 mos, recent hospital stay, immune compromised)[1]

If penicillin allergic (adults only)[3,4]:

Doxycycline 100 mg po bid x 5-7 days (Note: NOT if pregnant)

Reserve levofloxacin, moxifloxacin as last resort due to increasing resistance, risk of C.diffiicile.

(Macrolides, cephalosporins,TMP- SMX DS no longer recommended in sinusitis due to resistance concerns) [3,4]

SUPPORTIVE CARE

- Analgesics as needed for pain or fever
- Intranasal saline irrigation or saline sprays may be of benefit[1,3]
- Intranasal steroid effectiveness is unclear & recommendations to use are conflicting[1-4]
- Oral or topical decongestant may provide symptoms relief (if no contraindication)[2]

(U.S. no longer advises; risk of rhinitis medicamentosa (rebound congestion) if used >3-5 days).[1]

OTHER POINTS TO KEEP IN MIND

Red Flag Symptoms: Urgent consultation for severe symptoms, systemic toxicity, confusion, severe headache, if orbital or intracranial involvement suspected.[2] Sinus x-rays, CT not indicated for uncomplicated sinusitis as cannot differentiate ABRS from AVRS

1. Infectious Disease Society of America; IDSA Clinical Practice Guideline for Acute Bacterial Rhinosinusitis in Children and Adults. *Clinical Infectious Diseases* 2012; DOIU:10.1093/cid/cir1043.)
2. Desrosiers et al. Canadian clinical practice guidelines for acute and chronic rhinosinusitis. *Allergy,Asthma & Clinical Immunology* 2011; 7:2
3. Fryters et al. *CFPC: Infectious Diseases:Sinusitis.* E-therapeutics, Canadian Pharmacists Association, 2015
4. Rosenfeld et al. Clinical Practice Guideline (Update): Adult Sinusitis. *Otolaryngol-Head Neck Surg* 152:S1-29, 2015.