

Management of Sinusitis in Adults

Clinical Practice Guideline

MedStar Health

Antibiotic Stewardship

“These guidelines are provided to assist physicians and other clinicians in making decisions regarding the care of their patients. They are not a substitute for individual judgment brought to each clinical situation by the patient’s primary care provider in collaboration with the patient. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but should be used with the clear understanding that continued research may result in new knowledge and recommendations.”

ADULT PATIENTS (18 years old or older)

1. Antibiotics should not be given for viral rhinosinusitis or sinusitis.
2. Symptomatic therapies to treat nasal obstruction, rhinorrhea as well as fever are appropriate. These include:
 - a. Acetaminophen or NSAIDs
 - b. Saline irrigation
 - c. Intranasal glucocorticoids
 Other therapies often used but which have not been studied specifically in acute rhinosinusitis are:
 - a. Antihistamines to dry secretions
 - b. Mucolytics to make mucous thinner
 - c. Intranasal decongestants—should be used cautiously if at all due to risk of rhinitis medicamentosa
 - d. Oral decongestants—of most value for patients with concurrent eustachian tube dysfunction. Should be avoided or used cautiously in those with cardiovascular disease, bladder outlet obstruction, or acute angle closure glaucoma.
3. Indications for antibiotics include rhinosinusitis symptoms lasting **seven or more days** and **any** of the following:
 - a. Purulent nasal discharge, or
 - b. Maxillary tooth or facial pain, especially unilateral, or
 - * Note: isolated tooth pain does not necessarily necessitate treatment with antibiotics.
 - c. Unilateral maxillary sinus tenderness, or
 - d. Worsening symptoms after initial improvement (double worsening)
4. Initial antibiotic treatment of acute bacterial sinusitis should be with the most narrow-spectrum agent which is active against the likely pathogens. Options include:
 - a. Low Risk for Pneumococcal Resistance: Amoxicillin-clavulanate (either 500 mg/125 mg orally three times daily or 875 mg/125 mg orally twice daily) for five to seven days.
 - b. Higher Risk for Pneumococcal Resistance: High dose amoxicillin-clavulanate extended release 2000 mg every 12 hours for five to seven days .
 - c. Penicillin Allergy: Doxycycline 100 mg every 12 hours or Doxycycline 200 mg daily for five to seven days; Cefixime 400 mg daily or cefpodoxime 200 mg twice daily with or without clindamycin (300 mg every 6 hrs).
 - d. NOT RECOMMENDED – Macrolides (clarithromycin or azithromycin), trimethoprim-sulfamethoxazole, and second- or third-generation cephalosporins are not recommended for empiric therapy in adults because of high rates of resistance of *S. pneumoniae* (and of *H. influenzae* for trimethoprim-sulfamethoxazole).

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5. Patients who fail to respond to initial antibiotic therapy should be re-evaluated to confirm that symptoms remain consistent with acute bacterial sinusitis, to consider alternative diagnoses, and to evaluate for complications of acute sinusitis such as pre-septal or orbital cellulitis, intracranial abscess, osteomyelitis or cavernous sinus thrombosis. If acute bacterial sinusitis remains the working diagnosis, the patient should be treated with an oral antibiotic in a different class from the first agent used. Treatment options include:
 - a. Amoxicillin-clavulanate 2 g/125 mg extended-release tablets orally twice daily for 7-10 days
 - b. Levofloxacin 750 or 500 mg orally once daily for 7-10 days
 - c. Moxifloxacin 400 mg orally once daily for 7-10 days
 - d. A third-generation cephalosporin plus clindamycin
 - e. For penicillin-allergic patients, options for second-line therapy include:
 - i. Doxycycline 100 mg orally twice daily or 200 mg orally daily for 7-10 days
 - ii. Levofloxacin 500 mg orally once daily for 7-10 days
 - iii. Moxifloxacin 400 mg orally once daily for 7-10 days

***The U.S. Food and Drug Administration is advising that the serious side effects associated with fluoroquinolone antibacterial drugs generally outweigh the benefits for patients with sinusitis, bronchitis, and uncomplicated urinary tract infections who have other treatment options. For patients with these conditions, fluoroquinolone should be reserved for those who do not have alternative treatment options.**

<http://www.fda.gov/Drugs/DrugSafety/ucm500143.htm> (5/12/2016)

MEDCONNECT RESOURCES

A sinusitis specific power plan is present in MedConnect to facilitate appropriate treatment orders:

 **AMB Adult Sinusitis Treatment**

PATIENT EDUCATION

Choosing wisely: <http://www.choosingwisely.org/patient-resources/treating-sinus-problems-aaaai/>

DEFINITIONS

Antimicrobial stewardship refers to coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration. Antimicrobial stewards seek to achieve optimal clinical outcomes related to antimicrobial use, minimize toxicity and other adverse events, reduce the costs of health care for infections, and limit the selection for antimicrobial resistant strains. - See more at: http://www.idsociety.org/stewardship_policy/#sthash.SM1baBaC.dpuf

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