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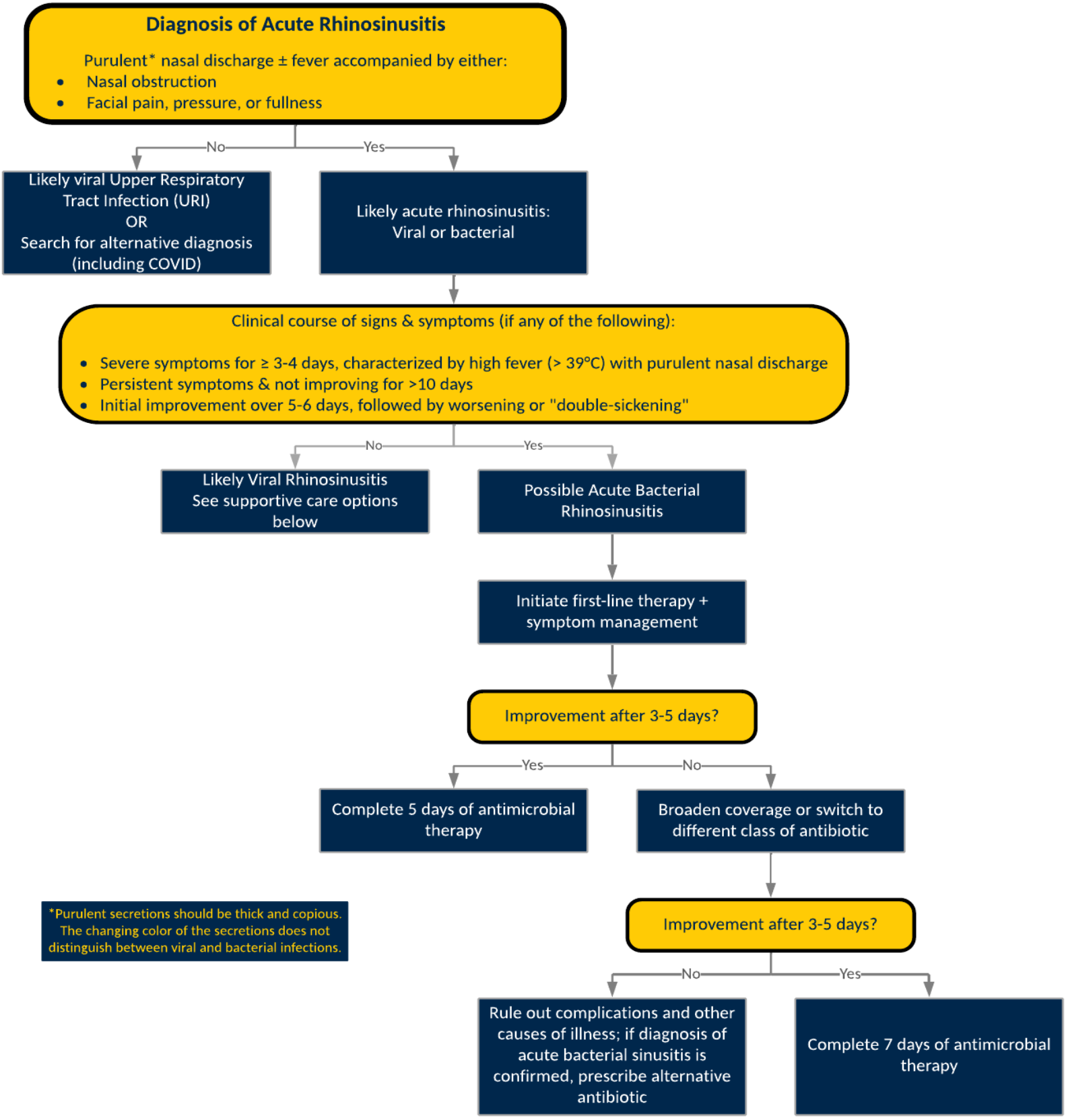
ACUTE RHINOSINUSITIS



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Indications	Common Pathogens	Empiric Therapy	Duration of Therapy	Comments

Acute Bacterial Rhinosinusitis
 	
Diagnosis of rhinosinusitis, with clinical course consistent with possible bacterial infection:
1. Severe symptoms for > 3-4 days, characterized by high fever (> 39°C) with purulent nasal discharge
 	
2. Persistent symptoms & not improving for > 10 days
 	
3. Initial improvement over 5-6 days, followed by worsening or "double-sickening"
	Streptococcus pneumonia
	
	Haemophilus influenzae
	
	Moraxella catarrhalis
	
	Streptococcus pyogenes
	
	Staphylococcus aureus
	
	Gram-negative bacilli
	
	Anaerobes
	
	Respiratory viruses
		1st line:
		Amoxicillin-clavulanate 875 mg-125 mg PO BID
		
		Low/Medium/high-risk PCN allergy*:
		Doxycycline 100 mg PO BID
		
		If odontogenic source leading to sinusitis ADD **metronidazole** 500 mg PO TID if odontogenic source leading to sinusitis
		
		2nd line (after initial treatment failure):
		Levofloxacin 500 mg PO Daily
		
		If odontogenic source leading to sinusitis ADD **metronidazole** 500 mg PO TID if odontogenic source leading to sinusitis
			Uncomplicated Acute Bacterial Rhinosinusitis:
			5 days for patients who have improvement in symptoms within 3-5 days
			
			Acute Bacterial Rhinosinusitis after failing initial therapy, transitioned to second line therapy:
			7 days for patients who have improvement in symptoms within 3-5 days
				• Potential adjunctive therapies to offer include:
				  • Hydration
				  • Analgesics
				  • Antipyretics
				  • Nasal corticosteroids
				  • Nasal saline irrigation
				• Patients who have been exposed to amoxicillin-clavulanate in the last 30 days may be considered for doxycycline as initial therapy.
				• Streptococcus pneumonia has local resistance rates to azithromycin of ~50%, and azithromycin therefore is not recommended for treatment of acute bacterial rhinosinusitis.
				• Doxycycline is contraindicated in pregnant patients.
				• Adjust levofloxacin and amoxicillin-clavulanate for renal dysfunction.
				• In a patient without severe disease, who is non-pregnant, without CHF, DM, pulmonary disease, immunodeficiency, or prior sinus surgery, a watchful waiting approach is reasonable after discussion and shared decision-making with the patient. Follow-up should be arranged, and if no improvement after 7 days, starting antibiotics should be considered.
				• This guideline does not address patients with severe immunocompromise (i.e., on prednisone > 20 mg po daily, ≥ 2 immunosuppressants, active hematologic malignancy, active malignancy on chemotherapy, neutropenia, HIV with CD4 < 200). Those patients require an individualized approach for evaluation and management and are outside of the scope of this guideline.

*See Beta-lactam Allergy Evaluation and Empiric Therapy Guidance document for further allergy information. High-risk allergies are defined as: respiratory symptoms (chest tightness, bronchospasm, wheezing, cough), angioedema (swelling, throat tightness), cardiovascular symptoms (hypotension, dizzy/lightheadedness, syncope/passing out, arrhythmia), anaphylaxis. If a patient has a high-risk allergy to penicillins, cephalosporins, or carbapenems, the only beta-lactam antibiotic that can be safely used without Allergy consult is aztreonam (if the allergy is to ceftazidime or aztreonam, aztreonam should be avoided as well).

References

Chow AW et al. IDSA Clinical Practice Guideline for acute Bacterial Rhinosinusitis in Children and Adults. CID. 2012 Apr;54(8):e72-e112.
Rosenfeld RM et al. Acute Sinusitis in Adults. NEJM. 2016 Sep 8;375(10):962-70.

Antimicrobial Subcommittee Approval: 11/2023	Originated: Unknown
P&T Approval: 01/2024	Last Revised: 10/2023

Revision History:
10/23: Updated allergy wording