AAO-HNSF Updated Clinical Practice Guideline: Adult Sinusitis

“More than 20% of antibiotics prescribed for adults in the U.S. are to treat sinus infections. This updated guideline empowers clinicians and their educated patients to make those treatment decisions together, being more judicious in the use of antibiotics and talking through the options for symptom relief. More than ever, there is a greater role for shared decision-making when managing sinusitis.”

— Richard M. Rosenfeld, MD, MPH, guideline chair

What is adult sinusitis?

- Sinusitis, also called “rhinosinusitis,” is inflammation of the paranasal sinuses and the nasal cavity. It generally occurs when viruses or bacteria infect the sinuses (often during a cold) and begin to multiply. The body’s reaction to the infection causes the sinus lining to swell, blocking drainage channels. This causes mucus to fill up the nose.

- Acute sinusitis is when there has been up to 4 weeks of cloudy or colored (not clear) drainage from the nose with congestion, or pain in the face or around the eyes.

- It is important to identify if the cause of sinusitis is bacterial or viral as the treatment is based on the cause. Acute viral sinusitis does not benefit from antibiotic treatment, but acute bacteria sinusitis may.

Why is the adult sinusitis guideline important?

- Sinusitis affects about 1 in 8 adults in the United States, resulting in over 30 million annual diagnoses. The direct cost of managing acute and chronic sinusitis exceeds $11 billion per year.

- More than 1 in 5 antibiotics prescribed in adults are for sinusitis, making it the fifth most common diagnosis responsible for antibiotic therapy.

- Despite the high prevalence and economic impact of sinusitis, considerable practice variations exist across and within the multiple disciplines involved in managing the condition.

- The original AAO-HNSF adult sinusitis guideline, published in 2007, has been accessed over 60,000 times at the National Guideline Clearinghouse and cited in more than 725 clinical publications.

What is the purpose of the adult sinusitis guideline?

- The primary purpose of the guideline is to identify quality improvement opportunities in managing adult sinusitis and to create explicit and actionable recommendations to implement these opportunities in clinical practice.

- The guideline was updated by a multi-disciplinary panel of experts in otolaryngology–head and neck surgery, infectious disease, family medicine, allergy and immunology, advanced practice nursing, and a consumer advocate.

What are significant points made in the guideline?

1. A) Differential Diagnosis of Acute Rhinosinusitis — Clinicians should distinguish presumed acute bacterial rhinosinusitis (ABRS) from acute rhinosinusitis caused by viral upper respiratory infections and noninfectious conditions. A clinician should diagnose ABRS when (a) symptoms or signs of acute rhinosinusitis (purulent nasal drainage accompanied by nasal obstruction, facial pain-pressure-fullness, or both) persist without evidence of improvement for at least 10 days beyond the onset of upper respiratory symptoms, or (b) symptoms or signs of acute rhinosinusitis worsen within 10 days after an initial improvement (double worsening).
B) Radiograph Imaging and Acute Rhinosinusitis – Clinicians should not obtain radiographic imaging for patients who meet diagnostic criteria for acute rhinosinusitis, unless a complication or alternative diagnosis is suspected.

2. Symptomatic Relief of Viral Rhinosinusitis (VRS) – Clinicians may recommend analgesics, topical intranasal steroids, and/or nasal saline irrigation for symptomatic relief of VRS.

3. Symptomatic Relief of Acute Bacterial Rhinosinusitis (ABRS) – Clinicians may recommend analgesics, topical intranasal steroids, and/or nasal saline irrigation for symptomatic relief of ABRS.

4. Initial Management of Acute Bacterial Rhinosinusitis (ABRS) – Clinicians should either offer watchful waiting (without antibiotics) or prescribe initial antibiotic therapy for adults with uncomplicated ABRS. Watchful waiting should be offered only when there is assurance of follow up, such that antibiotic therapy is started if the patient’s condition fails to improve by 7 days after ABRS diagnosis or if it worsens at any time.

5. Choice of Antibiotic for Acute Bacterial Rhinosinusitis (ABRS) – If a decision is made to treat ABRS with an antibiotic agent, the clinician should prescribe amoxicillin with or without clavulanate as first-line therapy for 5 to 10 days for most adults.

6. Treatment Failure for Acute Bacterial Rhinosinusitis (ABRS) – If the patient fails to improve with the initial management option by 7 days after diagnosis, or worsens during the initial management, the clinician should reassess the patient to confirm ABRS, exclude other causes of illness, and detect complications. If ABRS is confirmed in the patient initially managed with observation, the clinician should begin antibiotic therapy. If the patient was initially managed with an antibiotic, the clinician should change the antibiotic.

7. A) Diagnosis of Chronic Rhinosinusitis (CRS) or Acute Rhinosinusitis (ARS) – Clinicians should distinguish CRS and recurrent ARS from isolated episodes of acute bacterial rhinosinusitis and other causes of sinonasal symptoms.

B) Objective Confirmation of a Diagnosis of Chronic Rhinosinusitis (CRS) – The clinician should confirm a clinical diagnosis of CRS with objective documentation of sinonasal inflammation, which may be accomplished using anterior rhinoscopy, nasal endoscopy, or computed tomography.

8. Modifying Factors – Clinicians should assess the patient with chronic rhinosinusitis or recurrent acute rhinosinusitis for multiple chronic conditions that would modify management such as asthma, cystic fibrosis, immunocompromised state, and ciliary dyskinesia.

9. Testing for Allergy and Immune Function – The clinician may obtain testing for allergy and immune function in evaluating a patient with chronic rhinosinusitis or recurrent acute rhinosinusitis.

10. Chronic Rhinosinusitis (CRS) with Polyps – The clinician should confirm the presence or absence of nasal polyps in a patient with CRS.

11. Topical Intranasal Therapy for Chronic Rhinosinusitis (CRS) – Clinicians should recommend saline nasal irrigation, topical intranasal corticosteroids, or both, for symptom relief of CRS.

12. Antifungal Therapy for Chronic Rhinosinusitis (CRS) – Clinicians should not prescribe topical or systemic antifungal therapy for patients with CRS.

About the AAO-HNS/F
The American Academy of Otolaryngology—Head and Neck Surgery (www.entnet.org), one of the oldest medical associations in the nation, represents about 12,000 physicians and allied health professionals who specialize in the diagnosis and treatment of disorders of the ears, nose, throat, and related structures of the head and neck. The Academy serves its members by facilitating the advancement of the science and art of medicine related to otolaryngology and by representing the specialty in governmental and socioeconomic issues. The AAO-HNS Foundation works to advance the art, science, and ethical practice of otolaryngology-head and neck surgery through education, research, and lifelong learning. The organization’s vision: “Empowering otolaryngologist-head and neck surgeons to deliver the best patient care.”