Cincinnati Children's Hospital Medical Center

Guideline Highlights

Acute Bacterial Sinusitis (ABS)

Focus Population: Children 1 to 18 years of age with suspected acute bacterial sinusitis

Exclusions:
- Children under 1 year of age
- Children with chronic sinusitis
- Children with identified or suspected periorbital, orbital or intracranial abscess
- Children with cystic fibrosis
- Children with underlying anatomic paranasal abnormalities
- Children with ciliary dyskinesia
- Children with immune deficiencies

Guideline Highlights and Recommendations

Assessment and Diagnosis

1. The diagnosis is based on the presence of a constellation of clinical signs and symptoms of **at least 10 days duration without improvement**.
- A less common presentation, acute severe bacterial sinusitis, represents a more toxic form of ABS in which severity of symptoms, rather than persistence of symptoms, is consistent with the diagnosis.
- The consistency and color of the nasal discharge are not helpful in differentiating ABS from other upper respiratory illnesses.

2. Routine radiologic studies and routine laboratory screening are **not** indicated in the initial management of a patient suspected of uncomplicated acute bacterial sinusitis.
- For the child with complications or unsuccessful therapy, make the decision whether or not to perform radiologic studies in collaboration with the consulting specialist.

Medication

3. First-line antibiotic therapy is high-dose amoxicillin or high-dose amoxicillin-clavulanate for 10 to 14 days.
- Rates of *S. pneumoniae* resistance to penicillin (including amoxicillin) are increasing nationally and locally.

4. Second-line antibiotic therapy is cefuroxime, cefpodoxime and cefdinir for 10 to 14 days.

5. Alternative agents include IM ceftriaxone (5 days) or combination therapy such as clindamycin plus cefixime.

6. Symptomatic treatment of cough or congestion is not effective and may be harmful.

7. Follow up within 72 hours to assess for expected clinical response.

Consults and Referrals

8. Refer to otolaryngology and/or ophthalmology:
- when signs of impending suppurative complications are present, or
- in cases of a moderately to severely ill child with suspected acute frontal or sphenoid sinusitis.

Parental Expectations and Education

9. Explore parental expectations for the office visit and discuss facts regarding respiratory infections and preventive behavior, which may include:
- the natural history of URIs / ABS
- diagnostic uncertainty
- viral and bacterial sources of ABS
- role of antibiotics
  - appropriate use of antibiotics
  - persistent or severe infections
- bacterial resistance
- lack of proven efficacy for over-the-counter medications for symptom relief
  - managing cough symptoms
- observation for complications of ABS
- prevention of URIs may decrease risk of ABS
  - handwashing
  - annual influenza vaccination