

Evaluation and Management of Sinusitis In General Practice

Pages with reference to book, From 125 To 126

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Sinusitis is usually a clinical diagnosis based on the history and physical examination findings. In more complicated cases, however, radiography may be indicated.

Acute sinusitis is defined as sinusitis lasting 4 weeks or less¹. During the first 7 to 10 days of illness, differentiating between bacterial sinusitis and a viral upper respiratory tract infection may be difficult. In acute bacterial sinusitis, symptoms generally worsen after 5 days; persist for at least 10 days or are much more severe than those typically associated with viral sinusitis². Subacute is defined when symptoms have been present for 4 to 12 weeks and chronic when symptoms persist longer than 12 weeks¹.

Recurrent acute sinusitis is defined as more than four episodes a year, with each episode lasting more than 7 days and complete resolution between attacks³.

Causative Organisms

The organisms responsible for acute sinusitis are streptococcus pneumoniae the commonest, followed by haemophilus influenzae and Moraxella (Branhatnella) catarrhalis. Chronic sinusitis is caused by the same organisms but in addition, higher incidences of Staphylococci and anaerobes are seen in chronically inflamed sinuses.

Diagnosis

Diagnosis of sinusitis in adults requires the presence of at least two major factors or one major factor and two minor factors².

Major Factors

Facial pain or pressure (requires another major factor for diagnosis)

Treatment

Antimicrobial therapy is indicated in acute sinusitis recurrent acute sinusitis and acute exacerbations of chronic sinusitis. It may or may not be beneficial in sub-acute or chronic sinusitis². First line antibiotic for acute sinusitis is Amoxil 50 mg/kg/day in three divided doses for 10 to 14 days³. Erythromycin or Septran may be used in patients who are allergic to penicillin². Some studies have suggested that 3 to 5 days of antibiotics may be as effective as long-term treatment, principally in adults. However, further investigation is needed, particularly in children, before shorter therapy can be universally adopted⁴.

Treatment recommendations for various types of sinusitis.

| Type of sinusitis | Recommendation therapy | Duration of therapy |
|--|---|------------------------|
| Acute viral | No antibiotics | Depends on symptoms |
| | Decongestants | |
| | Steam inhalation | |
| | Paracetamol | |
| Acute bacterial | Amoxil or Trimethoprim - sulfamethoxazole (Septran) or Erythromycin | 10 days |
| Sub-acute, no recent Antibiotic therapy | Septran or Amoxicillin | 2-3 weeks |
| Sub-acute, recent Antibiotic therapy | Augmentin | 2-3 weeks |
| Chronic, no recent antibiotic therapy | Augmentin/ Clarithromycin + Intra nasal steroid therapy (drop or spray) | 3-4 weeks 4-6 weeks |
| Chronic, recent antibiotic therapy | Augmentin/Clarithromycin/ Ciprofloxacin + Intra nasal steroid therapy (drop or spray) | 3-4 weeks 4-6 weeks |
| Recurrent | Augmentin | 14 days |

Augmentin is the drug of choice for chronic sinusitis. In severe cases ofloxacin may be given in combination with metronidazole or clindamycin. Chronic sinusitis is usually treated for 3 to 6 weeks. In all types of sinusitis, use of nasal sprays, humidifiers, decongestants and anti-histamines may help

control symptoms and speed recovery². However, the review by Zeiger⁵ concludes that a recommendation about the use of oral decongestants in sinusitis cannot be made because of the lack of controlled studies. Even good studies of topical decongestants in sinusitis do not exist. But Zeiger has suggested that topical decongestants may be helpful in certain clinical situations. But they should be used for a short period of time because of the early rebound effect and development of rhinitis medicamentosa with chronic use. In chronic sinusitis, nasal administration of steroid therapy (drop or spray form) is very effective⁶. It will reduce inflammatory oedema and improve sinus ventilation. They must be administered in the correct position (with the head upside down) and should not be used for more than 6 weeks.

Indications for ENT Referral

- > When adequate medical treatment has failed.
- > When there is suspicion of more sinister pathology such as neoplasia or Wegener's granuloma.
- > When there are alarming signs and symptoms like:
 - > Blood stained unilateral nasal discharge.
 - > Facial numbness
 - > Diplopia
 - > Deafness
 - > Intranasal mass

References

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5. Zeiger RS: Prospects for ancillary treatment of sinusitis in the 1990's. *J. Allergy Clin Immunol* 1992, 90 : 478.
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