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Evaluation and management of sinusitis in general practice

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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 less[1]. 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 bacteria! sinusitis, symptoms generally worsen after 5 days; persist for at least 10 days or are much more severe than those typically associated with viral sinusitis[2]. Subacute is defined when symptoms have been present for 4 to 12 weeks and chronic when symptoms persist longer than 12 weeks[1].

Recurrent acute sinusitis is defined as more than four episodes a year, with each episode lasting more than 7 days and complete resolution between attacks[3].

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 factors[2].

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 sinusitis[2]. First line antibiotic for acute sinusitis is Amoxil 50 mg/kg/day in three divided doses for 10 to 14 days[3]. Erythromycin or Septran may be used in patients who are allergic to penicillin[2]. 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 adopted[4].

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	10 days
	or Trimethoprim - sulfamethoxazole (Septran)	
	or Erythromycin	
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 +	3-4 weeks
	Intra nasal steroid therapy (drop or spray)	4-6 weeks
Chronic, recent antibiotic therapy	Augmentin/Clarithromycin/ Ciprofloxacin +	3-4 weeks
	Intra nasal steroid therapy (drop or spray)	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 terated 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 recovery[2]. However, the review by Zeiger[5] 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 exit. 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 sinutitis, nasal administration of steroid therapy (drop or spray form) is very effective[6]. 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

1. Lanza Dc. Kennedy DW. Adult rhinosinusitis defined. Otrolaiyngol Head Neck Surg 1997;117(3 Pt 2): S 1-7.
2. Grrpreet S. Ahuja, Josette Thompson. What role for antibiotics in otitis media and sinusitis. Postgraduate Medicine. 1998; 104(3):93- 104.
3. lsaacson 0. Sinusitis in childhood, Pediatr Clin North Am 1996;43(6):1297-318.
4. Pichichero ME, Cohen R. Shortened course of antibiotics therapy for acute otitis media, sinusitis and tonsillopharyngitis. Pediatr Infect Dis J 1997;16(7):680-95.
5. Zeiger RS: Prospects for ancillary treatment of sinusitis in the 1990's. J. Allergy Clin Lmmunol 1992, 90 : 478.
6. Veronica Kennedy, Robin Youngs. A guide to the management of chronic sinusitis. The Practitioner. 1998;242:7 12-717.