MANAGEMENT OF SINUSITIS IN ADULTS AND CHILDREN

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Management of Acute Sinusitis in Pediatrics
Friday, September 01, 2006

Clinical Indicators of Acute Sinusitis
Age <7 years Not improving, persistent URI symptoms >10-14 days
-Nasal Discharge (any color) not improving
-Persistent cough day and night
Age >7 years (typical): Not improving, persistent URI symptoms >10-14 Days plus:
 +/- malodorous breath in absence of pharyngitis, poor dental hygiene, nasal foreign body
 +/- facial pain and headache
 +/- fever
 +/- morning eye swelling
Age >7 years acute onset (rare)
- significant fever
- nasal discharge
- headache, facial pain
- periorbital swelling

Differential Diagnosis:
Viral URI, Allergic rhinitis
Foreign body, poor dental hygiene

Acute sinusitis

Rule out serious orbital or intracranial complications; orbital pain; visual changes, proptosis, facial or periorbital swelling/erythema

Recurrent acute sinusitis? (>2 episodes/year)
- Yes
- No

1st line antibiotics
Adjuvant therapy
Rule out allergic rhinitis with 3-4 wk trial of nasal steroids
Consider Allergic Etiologies

1st line antibiotics
Adjuvant therapy

Complete Response

Poor Response

Alternative 1st line or 2nd line Rx

Improved?

No

Yes

Improved?

Routine follow-up, consider treatment of allergic rhinitis

4 wks of continuous 2nd-line antibiotics and trial of nasal steroids for 4 weeks

Improved?

No

Refer to ENT

Yes

Routine follow-up, consider treatment of allergic rhinitis

1st line therapy (10 days):
Amoxicillin 45-90mg/kg/d bid
Augmentin ES 90mg/kg/d bid
Cefuroxime 30mg/kg/d bid
Cefdinir 14mg/kg qd

2nd line therapy (10-14 days):
Augmentin ES 90 mg/kg/d bid
B-lactam allergic
Clarithromycin
TMP-SMX
Azithromycin
Erythromycin

Chronic or Subacute Sinusitis
30 days URI symptoms
-Nasal obstruction/discharge
-Cough day and night
-Headaches
-Intermittent fevers

Predisposing conditions:
-Mechanical obstruction (polyps, foreign body)
-Mucosal edema (allergic rhinitis)
-Impaired ciliary function

Adjuvant Therapy
-Humidifier
-Saline nose drops
-Steam inhalation / Hot Shower
-Warm, moist compress

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This guideline is designed for general use for most patients but may need to be adapted to meet the special needs of a specific patient as determined by the patient’s provider.
Management of Acute Sinusitis in Adults

Friday, September 01, 2006

Clinical Indicators of Acute Sinusitis:
- Upper respiratory symptoms for at least 7 days and 2 or more of the following:
  - Dental Pain (Maxillary)
  - Purulent nasal discharge on exam (adults)
  - Unilateral pain above or below eyes on leaning forward
  - Facial congestion/fullness or head
  - Poor response to decongestants or antihistamines

Predisposing conditions:
- Mechanical obstruction (polyps, tumor, foreign body)
- Mucosal edema (rhiitis: allergic, vasomotor, viral)
- Impaired ciliary motility (Kartagener syndrome, CF)

Adjuvant Therapy for Acute Sinusitis:
- Warm moist compress / fluids / hot steamy shower
- Saline nasal spray or rinse (1/4 tsp salt to 8 oz. warm water)
- Nasal decongestants e.g phenylephrine or oxymetazoline (2 sprays each nostril 3-4 days)
- Oral decongestants e.g pseudoephedrine 60mg qid
- Mucolytics e.g guaifenesin
- Analgesics: Tylenol, ASA (avoid in children and pt with nasal polyps) or Ibuprofen prn
- Antihistamines: Not recommended

Differential Diagnosis:
- Allergic rhinitis, viral URI
- Nasal foreign body, TMJ
- Migraine, tension headache
- Temporal arteritis, dental disease

Inflammatory Disease on CT
- Sinus opacification
- Air fluid levels
- Marked mucosal thickening
- Bony erosion or expansion
- Polyps

1st line therapy (10 days)
- Amoxicillin
  -500mg TID (mild disease)
  -1000mg TID (if significant facial/dental pain or fever)
- Augmentin
- Cefdinir

If β Lactam allergy:
- TMP/SMX DS
- Doxycycline
- Macrolides (azithro, clarithro, erythro)

2nd line Therapy (10-21 days) (recent antibiotic use or failure from 1st line)
- High dose Augmentin (2000 bid)
- Levofloxacin
- Ceftriaxone
- Combination therapy of clindamycin and HD amoxicillin or rifampin

If β Lactam allergy:
- Levoflox
- Combination therapy of clindamycin and rifampin

Pt must complete 4 wks of continuous β-lactamase resistant antibiotic before CT. Consider trial nasal/oral steroids prior to CT (prednisone 60 mg x 3 days then 4 day taper)

Acute sinusitis

Rule out serious orbital or intracranial complications:
- Orbital pain, visual changes, proptosis, facial or peri orbital swelling/erythema

Recurrent acute sinusitis? (>4 episodes/year)

1st line antibiotics
- Adjuvant therapy
- Rule out allergic rhinitis with 3-4 wk trial nasal steroids
- Consider Allergic Etiologies

Complete Response
No Response
Partial Response

Repeat 1st line for 10-14 days

Improved?

Alternative 1st line or 2nd line Rx

Improved?

Improved?

Routine follow-up

Pt must complete 4 wks of continuous β-lactamase resistant antibiotic before CT. Consider trial nasal/oral steroids prior to CT (prednisone 60 mg x 3 days then 4 day taper)
Reference: