Sinusitis: inflammation of lining of paranasal sinuses (often including nasal mucosa)

Acute: cases x 4 wks or les

Recurrent: ≥ 4 episodes/yr each lasting ≥ 10 days with absence of sx in between cases

Chronic: cases x 12 wks or more (w/ or w/o txt)

Causes:
Allergens
Environmental irritants
Infections

Viruses (majority)

Bacteria:
2-10% adult (maybe secondary to infxn)
6-13% children

Fungi

Typical viral timeline

1. Nasal symptoms: clear/watery discharge, congestion, cough, scratchy throat, fever, headache/facial pain, myalgia **x 1-2 days**
2. Worse nasal symptoms: thicker, mucoid, purulent **x 3-6 days**
3. Improved nasal symptoms: clear and drying

Bacterial cases (adults):

Viral: if fever, resolves early; resp symptoms x 5-10 days

Bacterial:

- Persistent symptoms **>10 days** (no improvement)
- Severe sx (high fever >39 C and purulent nasal discharge x 3-4 days at start)
- Onset of worsening sx after 5-6 days of improvement (double-sickening = virus caused secondary bacterial infection)

Bacterial cases (children):

Starts with cough → followed by nasal discharge, fever

Rare: headache, facial pain or swelling

Bacterial pathogens: S. pneumonia, H. influenza, M. catarrhalis,

High dose amox

1. Severe infection (systemic toxicity, fever 39 C)
2. Daycare attendance
3. Age <2 or >n65
4. Recent hospitalization
5. Abx use within past month
6. Immunocompromised

90 mg/kg/day amox divided BID or TID

875 mg/125mg amox BID

Treatment goals:

Shorter duration of illness
Provide earlier symptomatic relief
Restore quality of life
Prevent recurrence or complications

Empiric treatment adults:

1st line: amoxicillin alone > amox-clav
2nd line: levo- or moxi-floxacin
doxycycline
IV ceftriaxone/cefotaxime

Empiric treatment children:

1st line: amox-clav > amox (more H. influenza infections; more B-lactamase-producing pathogens)
2nd line: doxycycline (>8 yo) or levofloxacin
Last line: 3rd gen cephalosporin (cefixime) **+** clindamycin

Duration:
Acute, uncomplicated adult: 5-7 days
Children: 10-14 days

Switch to alternative after:
2-3 days if sx worsen
3-5 days if no improvement

Adjunctive therapy:

1. Intranasal saline irrigation - adults (nasal irritation & burning)
2. Intranasal corticosteroids – esp. if concurrent allergic rhinitis

May be appropriate:

1. Topical or oral decongestants: risk of rebound congestion, dependency
2. Oral antihistamines (allergy-induced): risk of drowsiness, dry mouth, secretion thickening