

PEDIATRIC RHINOSINUSITIS

Episode 45.1

CLASSIFICATION

Acute

- Infection with complete resolution by 12 weeks

Recurrent

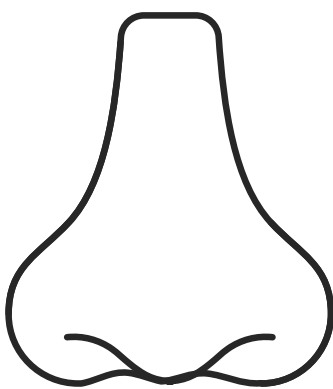
- Signs and symptoms completely resolve between episodes

Chronic

- Signs and symptoms persist longer than 12 weeks

SIGNS AND SYMPTOMS

Rhinorrhea
Nasal congestion
Headache
Facial pain
Irritability
Low grade or no fever



(Severe illness)
Purulent rhinorrhea
Nasal congestion
Facial pain or headache
Periorbital edema
Fever > 39C

ETIOLOGY

- Infection of nasal mucosa and sinuses
- Ostiomeatal complex obstruction from: inflammation, anatomic abnormalities, ciliary dysfunction, GERD, allergy, immunodeficiency, cystic fibrosis
- Most infections begin as an URTI!

VIRAL
RHINOVIRUS
(PARA)INFLUENZA
ADENOVIRUS

BACTERIAL
S. PNEUMONIA
M. CATARRHALIS
H. INFLUENZA
S. AUREUS
P. AERUGINOSA
PEPTO(STREPTO)COCCUS

MANAGEMENT

- Saline irrigation
- Antibiotics 10-14 day course. Aim to treat 7-10 days beyond symptom resolution
- 40%-60% resolve spontaneously

AMOXICILLIN ERYTHROMYCIN SEPTRA CLAVULIN CLARITHROMYCIN
Severe illness: CEFUROXIME (IV) PIPTAZO (IV)

SURGERY

- Adenoidectomy > association between adenoid hypertrophy and rhinosinusitis. No indication for tonsillectomy
- Anterior or middle meatal antrostomy > Provides aeration and dependent drainage
- Ethmoidectomy
- **Endoscopic sinus surgery** > safe, effective. Eradicates disease while being conservative. Facial growth is not altered



COMPLICATIONS OF RHINOSINUSITIS

- Orbital complications, meningitis, brain abscess
- Requires urgent treatment, sometimes surgery
- Antibiotics that cross the blood brain barrier