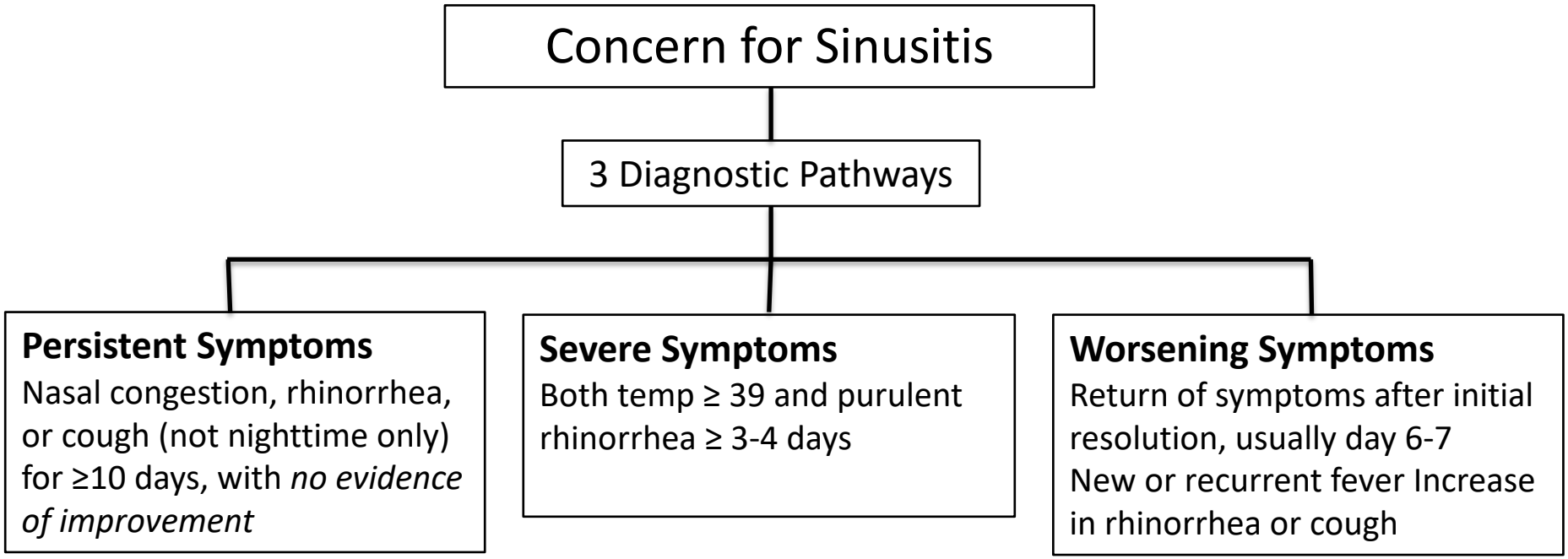
Pediatric Sinusitis



Treatment:

- Recommended antibiotic is Augmentin, duration of therapy 10-14 days
- In areas with high rate of penicillin resistant *S.pneumoniae*, recommend high dose 90mg/kg/day divided BID (maximum 2 gm BID)
- Alternatives: Doxycycline, 3rd generation Cephalosporin + Clindamycin, Levofloxacin
- For Persistent Symptoms pathway, may offer additional 3 days observation off antibiotics option

DeMuri GP, Wald ER. Clinical Practice. Acute bacterial sinusitis in children. NEJM. 2012; 367(12): 1128-1134.
Chow AW, Benninger MS, et al. IDSA clinical practice guideline for acute bacterial rhinosinusitis in children and adults. Clin Infect Disease 2012; 54(8):e72-e112.

Pediatric Sinusitis

- Important to differentiate from serial viral URIs or prolonged post-viral cough
  - Must be daytime cough (can still be worse at night)
  - Must be no improvement in URI symptoms at all, not improvement w/o resolution, then new URI symptoms again
- Other corroborating symptoms & signs: headache, facial pain, pain with percussion over frontal, maxillary sinuses or upper molars, post-nasal drip +/- associated sore throat, halitosis, puffy eyes esp in AM, boggy turbinates

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- Sinus development
  - Present at clinically significant size:
    - Maxillary & ethmoid at birth
    - Frontal at 3 years old
    - Sphenoid at 8 years old
  - Sinuses fully developed at 12-20 years old
- Although only a few studies exist, using a urine dipstick to test nasal secretions may be useful
- Insert a wet cotton swab 1-2cm to obtain nasal secretions and spread on a urine dipstick
- Score 4 or higher c/w bacterial sinusitis

Pts	0	1	2	3
Leuk Est	None or trace		1+	2-4+
Protein	0 or 1+	2+	3+	4+
pH	<7.5	7.5	8.0	8.5+
Nitrites	None	Light	Dark	

Song C, Chorath J, Pak Y, Redjal N. Use of Dipstick Assay and Rapid PCR-DNA Analysis of Nasal Secretions for Diagnosis of Bacterial Sinusitis in Children With Chronic Cough. Allergy Rhinol 2019 Jan 7;10:2152656718821281