

Upper respiratory tract infection

Pharyngitis (sore throat)	
Epidemiology	<ul style="list-style-type: none"> Late fall, winter, early spring (5 to 15 years)
Etiology	<ul style="list-style-type: none"> Viral is the most common i.e Respiratory viruses, Enterovirus, HSV, EBV, HIV. Bacterial Group A streptococcus Corynebacterium diphtheriae Neisseria gonorrhoeae Anaerobic bacteria → Lemierre's syndrome
Signs & symptoms	<ul style="list-style-type: none"> erythema, edema, (and/or) exudates Tender, enlarged lymph nodes Fever 38.4 to 39.4° C No signs and symptoms of viral infections
Epiglottitis	
Epidemiology	Young unimmunized children
Etiology	<ul style="list-style-type: none"> H.influenzae Type b S.pneumoniae S.aureus or Beta hemolytic streptococcus Viral or candida
Signs & symptoms	Dysphasia, drooling, and distress
Treatment	Ceftriaxone

*** Group A streptococcus is diagnosed by:**

- Antistreptolysin O (ASO).
- Culture.
- Rapid Bacterial antigen detection.

If it is misdiagnosed or untreated it may lead to rheumatic fever.

*** Corynebacterium diphtheriae**

- One of the most common causes of death in unvaccinated children.
- Toxin mediated disease (that is why they use toxoid as a vaccine)
- **diagnosis:**
 - ★ Tinsdale medium.
 - ★ ELIK's Test for conformation.
- **Treatment:** penicillin or erythromycin (if allergic)

Acute otitis media			
Etiology	<ul style="list-style-type: none"> S. pneumoniae H. influenzae Moraxella catarrhalis rarely GAS, S. aureus, viral & fungal 	Management	<ol style="list-style-type: none"> 1. Tympanocentesis 2. Amoxicillin or Augmentin (if it is β-lactamase producer) <ul style="list-style-type: none"> ❖ Mastoiditis treat for 2 weeks

Pertussis (whooping cough)(*viral-like infection)

Etiology	<ul style="list-style-type: none"> ● Bordetella pertussis (gram -ve bacilli), it contains: <ul style="list-style-type: none"> ❖ Pertussis toxin (PT) ❖ Pertactin (immunogenic virulence factor) ❖ Filamentous hemagglutinin (FHA) (attachment factor for adherence)
stages (like viruses)	<ul style="list-style-type: none"> ● incubation period (1-3 weeks) ● Catarrhal Stage 1-2 weeks ● Paroxysmal Stage 1-6 weeks ● Convalescent Stage 3-6 weeks
Diagnosis	<ul style="list-style-type: none"> ● Nasopharyngeal (NP) swabs (just like how viral infections are diagnosed!) ● Charcoal-horse blood T media ● Regan-Lowe, Bordet-Gengou(old)
Signs & symptoms	<u>Leukocytosis with lymphocyte predominance</u>
Management	Treatment → erythromycin Prevention → vaccination

Bacterial sinusitis

	Acute sinusitis	Chronic sinusitis
Generally	<ul style="list-style-type: none"> ● Children ● Diagnosis <u>X-rays CT/MRI</u> ● Periorbital cellulitis R/O sinusitis by CT/MRI ● Post-septal involvement treat as meningitis 	<ul style="list-style-type: none"> ● Less local symptoms ● Mimic allergic rhinitis ● Dx Image less useful than acute (changes persist after TTT) and <u>to R/O tumor</u> ● Obtain odontogenic X-rays if maxillary sinus
Etiology (like otitis media)	<ul style="list-style-type: none"> ● S.pneumoniae ● H.influenza ● M.catarrhalis 	<ul style="list-style-type: none"> ● S.pneumonia ● H.influenza ● M.catarrhalis ● + Oral anaerobes!
Treatment	Quinolones or Ceftriaxone for <u>1-2 weeks</u>	Quinolones or Ceftriaxone for <u>2-4 weeks</u>

Deep neck space infections

Where?	<ul style="list-style-type: none"> • Lateral pharyngeal, retropharyngeal or prevertebral space • Retropharyngeal infection may extend to mediastinum and present as mediastinitis
Signs & symptoms	<ul style="list-style-type: none"> • Patients are toxic with unilateral posterior pharyngeal soft tissue mass • Neck stiffness with retropharyngeal space infection/abscess
Etiology	Oral streptococci and anaerobes
Prognosis	poor without surgical drainage
Treatment	(Merpenem) or (Pipracillin & Clindamycin) for 2 weeks

Lemierre's syndrome

What is it?	A complication of peritonsillar abscess or post-dental infection
Signs & symptoms	sore throat, fever and shock due to IJV thrombophlebitis
Etiology	Fusobacterium necrophorum
Treatment	<p>(Merpenem) or (Pipracillin & Clindamycin) for 2 weeks</p> <p>Didn't respond? → venotomy</p>