

ANTIBIOTICS IN OHNS

Episode 8.1

GENERAL ANTIBIOTIC CONSIDERATIONS

1) Site of infection, 2) Probable organism, 3) Community prevalence, 4) Resistance, 5) Allergy, and 6) Cost

COMMON CONDITIONS

ACUTE OTITIS MEDIA- inflammation of the middle ear. 21% s. pneumoniae, 26% h. influenzae, 26% other bacteria (m. catarrhalis, and s. pyogenes), 26% sterile

1st line- aminopenicillin (amoxicillin)

2nd line (allergy, unresolved, assumed resistance)- macrolide + sulfonamide, or 2nd generation cephalosporin

MASTOIDITIS- inflammation within the mastoid air cells or periosteitis of the mastoid process. Treat if abscess present.

Same microbes as in AOM, p. aeruginosa

1st line- 3rd generation ceftriaxone for treatment of possible CSF or vascular invasion. If intracranial extension, need to add augmented PCN or metronidazole + anti-staph PCN

RHINOSINUSITIS- inflammation of paranasal and sinus tissues secondary to disease of the osteomeatal complex.

Same microbes as in AOM. Acutely treat with ABx, irrigation and decongestants. Chronically treat with nasal steroids

1st line- aminopenicillin or sulfonamide (amoxicillin, septr)

2nd line- macrolide (clarithromycin), 2nd generation cephalosporin (cefuroxime). Rule out intracranial extension, requiring 3rd generation cephalosporin (ceftriaxone)

PHARYNGITIS- inflammation of oropharynx. Multiple etiologies. Most are viral infections. Most common bacterial cause is S. pharyngitis (GABHS). Other microbes include n. gonorrhoea, mycoplasma, chlamydia, and h. flu. Rule out infectious mononucleosis (Epstein-Barr virus). Viral prodrome with odynophagia, fever, palpable lymph nodes and splenomegaly

1st line bacterial- natural penicillin (Pen V) or macrolide (erythromycin)

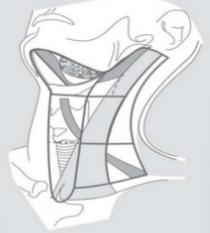
2nd line- augmented penicillin (amox-clav), clindamycin or 2nd generation cephalosporin

TONSILITIS- subtype of pharyngitis, with inflammation limited to the palatine tonsils

1st line- aminopenicillin (amoxicillin), clindamycin, or cephalosporin

EPIGLOTTITIS- used to be caused by haemophilus influenzae in pediatrics, however now we see it more in adults given vaccination programs

Airway management is the first priority. Once stabilized and patient admitted for observation, 1st line treatment- IV ampicillin-sulbactam / ceftriaxone or PO cefuroxime



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LARYNGITIS- laryngeal edema and inflammation, causing narrowing of the glottic chink (space between the cords)

Usually viral and resolves with voice rest

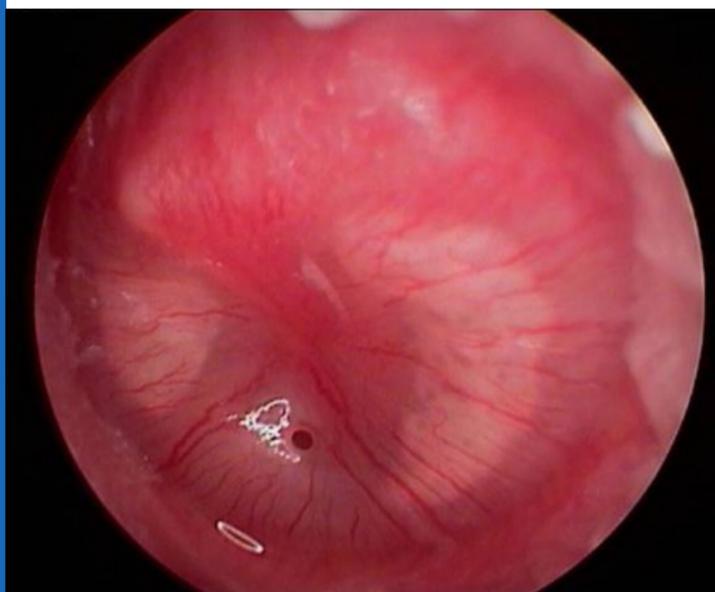
If prolonged clinical course, treat with macrolide or quinolone for typical URTI bugs (strep, h. flu, moraxella catarrhalis)

SURGICAL PROPHYLAXIS- if tissue levels of antibiotics are high at time of contamination (incision), infection and sepsis are reduced

Administered 1hr pre-op and continued post-op. Rarely needed in nasal or otologic surgery. No benefit seen in thyroid, parotid or submandibular gland surgeries

Skin = staphylococcus, consider cefazolin

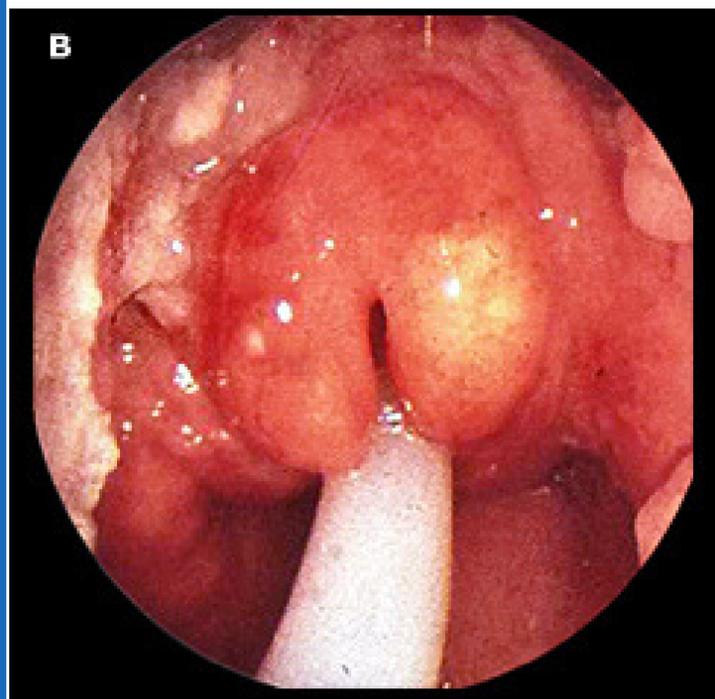
Mucous membrane = anaerobes, consider clindamycin or metronidazole



ACUTE OTITIS MEDIA



BACTERIAL PHARYNGITIS



EPIGLOTTITIS



MASTOIDITIS

