Pediatric Guidelines: Head and Neck Infections - Mastoiditis

Need for drainage/source control of head and neck infections should be evaluated carefully in consultation with Pediatric Otolaryngology, Head and Neck Surgery. If initial non-operative management is chosen, a narrow spectrum regimen (i.e. without vancomycin) is encouraged to facilitate transition to oral therapy.

ID consultation is recommended for head and neck infections occurring in immunocompromised patients, and for those with atypical features, chronic course, or lack of response to first line therapy.

Condition	Major Pathogens	First Choice Therapy	Alternative Therapy	Comments
Mastoiditis - acute (<1 month duration), immunocompetent patient	*Streptococcus pneumoniae* Group A streptococcus *Staphylococcus aureus*	Ampicillin-sulbactam (Unasyn) 50mg/kg/dose ampicillin IV q6h (max 2g ampicillin/dose) ADD Vancomycin 15mg/kg/dose IV q6-8h (initial max 1g/dose) for severe infection with adjacent complications, or suspicion of MRSA	**Severebeta lactam allergy[1]:** Consult ID/ASP	OHNS consult recommended Consider ID consult For intra-cranial extension, refer to Brain Abscess [2] section for empiric therapy Therapy may be tailored based on cultures from I&D

Mastoiditis - chronic (>= 1 month duration, usually non-intact tympanic membrane), immunocompetent patient	*Pseudomonas aeruginosa* *Staphylococcus aureus* Anaerobes	Piperacillin-tazobactam (Zosyn) 100mg/kg/dose piperacillin IV q6h (max 4g piperacillin/dose) AND Ofloxacin Otic Solution 10 drops to affected ear BID ADD Vancomycin 15mg/kg/dose IV q6-8h (initial max 1g/dose) for severe infection with adjacent complications, or suspicion of MRSA	**Severebeta lactam allergy[1]:** Consult ID/ASP	OHNS and ID consults recommended Therapy may be tailored based on cultures from I&D

These are guidelines only and not intended to replace clinical judgment. Modification of therapy may be indicated based on patient comorbidities, previous antibiotic therapy or infection history. Doses provided are usual doses but may require modification based on patient age or comorbid conditions. Refer toPediatric Antimicrobial Dosing Guideline[3] for further guidance on dosing in children, and Neonatal Dosing Guideline[4] for infants < 1 month of age. Consult a pediatric pharmacist for individualized renal or hepatic dose adjustment. For additional guidance, please contact Pediatric Infectious Diseases (ID) or the Pediatric Antimicrobial Stewardship Program (ASP).

Links:
[1] http://idmp.ucsf.edu/pediatric-guidelines-assessment-antibiotic-allergies
[2] http://idmp.ucsf.edu/pediatric-guidelines-cns-infections-brain-abscess
[3] http://idmp.ucsf.edu/pediatric-antimicrobial-dosing-benioff-childrens-hospital
[4] http://idmp.ucsf.edu/neonatal-antimicrobial-dosing-benioff-childrens-hospital-san-francisco