

# OTITIS EXTERNA REFERRAL GUIDELINE

MAINE MEDICAL PARTNERS - OTOLARYNGOLOGY • 92 CAMPUS DRIVE, SUITE C, SCARBOROUGH, ME • (207) 797-5753

HIGH RISK SUGGESTED EMERGENT CONSULTATION	MODERATE RISK SUGGESTED CONSULTATION OR CO-MANAGEMENT	LOW RISK SUGGESTED ROUTINE CARE
<b>SYMPTOMS AND LABS</b>  Suspicion for malignant otitis externa - spread of infection beyond the ear canal, especially in diabetics or immunocompromised host; look for severe pain out of proportion to exam, spread of edema/erythema beyond the canal, cranial nerve abnormalities (especially facial nerve weakness, numbness, palatal asymmetry, tongue deviation)  Suspicion for soft tissue abscess	<b>SYMPTOMS AND LABS</b>  Failure to improve after 48 hours of routine topical management  inability to clear ear canal of debris that may affect topical antibiotic administration  Concern for middle ear disease, such as cholesteatoma or chronic otitis media-painless drainage, tympanic membrane retraction or perforation with or without drainage, history of tympanostomy tube placement or middle ear surgery	<b>SYMPTOMS AND LABS</b>  Otherwise healthy patient with acute or sub-acute onset of ear canal edema, pain and purulence  Responding to topical antimicrobials in the first 48 hours
<b>SUGGESTED PREVISIT WORKUP</b>  Ensure diabetes control  CBC with differential, ESR, CRP  initiate topical and systemic antibiotics with anti-Pseudomonal coverage	<b>SUGGESTED WORKUP</b>  Consider culture of ear canal purulence if failing topical therapy  Consider adding systemic antimicrobial therapy if significant soft tissue involvement out of the ear canal	<b>SUGGESTED MANAGEMENT</b>  Topical antibiotics with or without steroid  If perforation unknown or suspected - quinolone such as ciprofloxacin or ofloxacin, consider Ciprodex or CiproHC if significant edema  If no perforation- quinolone as above; or Cortisporin solution if no tympanic membrane perforation (potential for ototoxicity if access the inner ear via a perforation); or acetic acid with or without steroid (potential for ototoxicity as well)  Treatment with twice daily drop therapy for 7-10 days is recommended  Counsel patient to keep ear dry throughout treatment; over-the-counter ear plug or cotton ball rubbed in Vaseline can be used for showering; avoid submerging ear under water  Pain management is necessary as acute otitis externa is a very painful condition; occasionally, a short-term supply of narcotics is necessary if pain is severe; topical analgesic drops are not recommended

## CLINICAL PEARLS

- 98% of acute otitis externa in North America is bacterial – most common pathogens Pseudomonas aeruginosa (20%-60% prevalence) and Staphylococcus aureus (10% - 70% prevalence); remaining 2-3% generally another gram-negative bacterium
- Fungal involvement is distinctly uncommon in primary AOE but may be more common in chronic otitis externa or after treatment of AOE with topical, or less often systemic antibiotics
- Anything that disrupts the epithelium of the ear canal can permit invasion by bacteria that cause diffuse AOE. Common predisposing factors for AOE are humidity or prolonged exposure to water, dermatologic conditions (eczema, seborrhea, psoriasis), anatomic abnormalities (narrow canal, exostoses), trauma or external devices (was removal, inserting earplugs, using hearing aids), and otorrhea caused by middle-ear disease. AOE may also occur secondary to ear canal obstruction by impacted cerumen, a foreign object, a dermoid cyst, a sebaceous cyst, or a furuncle
- 13% of normal volunteers are hypersensitive to neomycin, a component in Cortisporin drops
- Otalgia in the absence of swelling of the ear canal and without apparent middle ear disease should arouse suspicion of pathology outside the ear; particularly common in adults with a normal ear exam is temporomandibular joint (TMJ) syndrome. These patients commonly complain of pain not only in the ear but also radiating to the periauricular temple, or neck.

Maine Medical  
P A R T N E R S