SYMPTOMS AND LABS
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

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, TYPAMIC MEMBRANE RETRACTION OR PERFORATION WITH OR WITHOUT DRAINAGE, HISTORY OF TYMPOANOSTOMY TUBE PLACEMENT OR MIDDLE EAR SURGERY

SUGGESTED PREVISIT WORKUP
Ensure diabetes control
CBC with differential, ESR, CRP
initiate topical and systemic antibiotics with anti-Pseudomonal coverage

SUGGESTED WORKUP
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

SUGGESTED EMERGENT CONSULTATION

SUGGESTED CONSULTATION OR CO-MANAGEMENT

SUGGESTED ROUTINE CARE

HIGH RISK

MODERATE RISK

LOW RISK

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 otitis 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.