AAO-HNSF Updated Clinical Practice Guideline: Acute Otitis Externa

“Swimmer’s ear affects nearly 1 in 100 people annually and may cause intense pain. Eardrops offer prompt relief, but about one-third of cases are treated with oral antibiotics, which are ineffective and promote resistant bacteria. The updated guideline expands upon prior guidance with new clinical trials, new systematic reviews, and consumer participation, intended to optimize the diagnosis and treatment of this common disorder.”

— Richard M. Rosenfeld, MD, MPH, chair of the guideline panel

What is Acute Otitis Externa?

- Acute Otitis Externa (AOE), commonly known as “swimmer’s ear,” is one of the most common infections encountered by clinicians, affecting 2.4 million people (1 in 123) annually in the United States, with regional variations based on age and geography.

- AOE is an infection of the outer ear, usually caused by bacteria that multiply when water becomes trapped in the ear canal. AOE is more common in warmer climates and in the summer months when people have increased exposure to water. Other factors that cause AOE include: skin conditions that may contribute to debris in the ear canal, trauma from aggressive ear cleaning, trauma from wearing hearing aids, sweating, allergies, and stress.

- Common symptoms of AOE are inflammation, itching, a feeling of fullness with or without hearing loss, and pain when tugging on the earlobe or chewing food.

- Treatment for AOE includes analgesics and eardrops, which include antiseptics, antibiotics, and corticosteroids, alone or in combination. Eardrops are highly effective because of the high local concentration of drug in the ear canal.

- Oral antibiotics are ineffective for AOE because the major pathogens are resistant to commonly used drugs and the concentration achieved in the ear canal is low compared to topical therapy.

- Strategies to prevent AOE are aimed at limiting water accumulation and moisture retention in the external ear canal, and maintaining a healthy skin barrier.

Why is the Acute Otitis Externa Guideline Update important?

- AOE is one of the most common infections encountered by clinicians so it is important to promote appropriate use of analgesics and topical treatments for AOE and to discourage oral antibiotic therapy, which is ineffective and has adverse effects.

- The update includes new clinical trials, new systematic reviews, and participation of consumer advocates on the multidisciplinary panel of otolaryngology-head and neck surgery, pediatrics, infectious disease, family medicine, and dermatology experts.

- Developed using a planned protocol to ensure valid, actionable, and trustworthy recommendations.

Updates to the guideline include (since first publication in 2006):

- Addition of a dermatologist and consumer advocate to the guideline development group.

- Expanded action statement profiles to explicitly state confidence in the evidence, intentional vagueness, and differences of opinion.
Enhanced external review process to include public comment and journal peer review.

New evidence from 12 randomized controlled trials and 2 systematic reviews.

Review and update of all supporting text.

Emphasis on patient education and counseling with new tables that list common questions with clear, simple answers and provide instructions for properly administering eardrops.

**What are significant points made in the guideline?**

1. Clinicians should distinguish diffuse AOE from other causes of otalgia, otorrhea, and inflammation of the external ear canal.

2. Clinicians should assess the patient with diffuse AOE for factors that modify management (non-intact tympanic membrane, tympanostomy tube, diabetes, immunocompromised state, prior radiotherapy).

3. The clinician should assess patients with AOE for pain and recommend analgesic treatment based on the severity of pain.

4. Clinicians should *not* prescribe systemic antimicrobials as initial therapy for diffuse, uncomplicated AOE unless there is extension outside the ear canal or the presence of specific host factors that would indicate a need for systemic therapy.

5. Clinicians should prescribe topical preparations for initial therapy of diffuse, uncomplicated AOE.

6. Clinicians should inform patients how to administer topical drops and should enhance delivery of topical drops when the ear canal is obstructed by performing aural toilet, placing a wick, or both.

7. When the patient has a known or suspected perforation of the tympanic membrane, including a tympanostomy tube, the clinician should prescribe a non-ototoxic topical preparation.

8. If the patient fails to respond to the initial therapeutic option within 48-72 hours, the clinicians should reassess the patient to confirm the diagnosis of diffuse AOE and to exclude other causes of illness.

**About the AAO-HNSF**
The American Academy of Otolaryngology—Head and Neck Surgery (www.entnet.org), one of the oldest medical associations in the nation, represents about 12,000 physicians and allied health professionals who specialize in the diagnosis and treatment of disorders of the ears, nose, throat, and related structures of the head and neck. The Academy serves its members by facilitating the advancement of the science and art of medicine related to otorhinolaryngology and by representing the specialty in governmental and socioeconomic issues. The AAO-HNS Foundation works to advance the art, science, and ethical practice of otolaryngology-head and neck surgery through education, research, and lifelong learning. The organization's vision: "Empowering otolaryngologist-head and neck surgeons to deliver the best patient care."