

OTITIS MEDIA AND OTITIS EXTERNA IN ADULTS

Learning Objectives:

1. Describe diagnostic features and list a short differential diagnosis of otitis media and otitis externa in adults
2. Prescribe appropriate therapy for uncomplicated cases of otitis media or externa
3. Recognize more serious variants or complications of these conditions

Author's Note:

Ear infections, particularly otitis media, are much less common in adults than children for a variety of reasons (e.g., evolution of Eustachian tube anatomy, decreased frequency of viral URIs, etc.). There is correspondingly less literature on these problems in adults, and the clinical approaches described in most references are extrapolated from those in children. Nonetheless, you are likely to encounter both otitis media and otitis externa in adults in the ambulatory setting from time to time.

CASE ONE:

A 25-year-old woman presents with moderate unilateral ear pain of several hours duration a few days after the start of a viral URI (marked by nasal congestion and mild cough). It is worse with swallowing. There is no associated hearing loss, dizziness, or fever, but the ear "feels blocked." PMHx reveals no major medical problems. There is no history of recent ear trauma or infections, though she had many of the latter as a child.

Questions:

1. Describe your clinical impression and management plan if ear exam shows the following (assume remainder of exam is normal in each case):
 - a) Intact, patent ear canal. Tympanic membrane has dull appearance, with clear fluid behind it
 - b) Intact, patent ear canal with red, bulging tympanic membrane and opaque fluid behind it

- c) Tympanic membrane as in (b); ear canal has some mild swelling and erythema along the posterior wall. There is also some mild postauricular erythema, swelling and tenderness, and questionable slight protrusion of the pinna compared with the contralateral ear. The patient also has a fever.
 - d) Ear exam as in (b). However, the patient has developed severe dizziness and severe ipsilateral hearing loss.
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- e) An intact, patent ear canal with dull tympanic membrane (TM) containing patches/plaques of embedded white material.

CASE TWO:

A 55-year-old man presents with unilateral waxing/waning ear pain for the last couple of weeks. He had a viral URI several weeks earlier, but symptoms had all resolved except for frontotemporal headaches. When seen by you three months earlier, he had an asymptomatic middle ear effusion (MEE) on that side.

- 2. Describe your clinical impression and plan if ear exam today showed:
 - a) Normal landmarks and anatomy (MEE now gone)

- b) Findings similar to Case 1 (a)

CASE 3:

A 78-year-old woman presents with a several-day history of progressively worsening unilateral ear discomfort, initially dominated by pruritis. She wears a hearing aid on that side. There are no URI symptoms. There is no history of ear trauma or

infection; in fact, she prides herself on the clean state of her ears, maintained through regular use of Q-tip swabs.

3. Describe your clinical impression and therapeutic approach to a patient like this in each of the following scenarios (assume there are no other symptoms or medical problems, unless otherwise specified):

a) There is no discomfort on retraction of the pinna. The ear canal is partially covered by some yellowish material with black dots. The tympanic membrane is dull but otherwise unremarkable. The periauricular exam is normal.

b) There is minimal discomfort on retraction of the pinna. The ear canal is erythematous along part of its circumference, with some yellow-green material along the inferior aspect, but a clear view of the tympanic membrane (dull but otherwise unremarkable). The periauricular exam is normal.

c) There is minimal discomfort on retraction of the pinna. The ear is draining yellowish fluid that precludes adequate examination of the canal or tympanic membrane. The periauricular exam is normal.

d) As in (c), but there is moderate pain on retraction of the pinna, which is not protruding at rest. The ear canal is swollen and erythematous for the short distance that can be seen before the lumen is blocked by wet yellowish curd-like material in the lumen.

e) As in (d), but the patient has diabetes.

f) What advice would you give to a patient to prevent otitis externa?

CASE 4 (EXTRA CREDIT):

A previously healthy 65-year-old man presents with lancinating right ear pain for the past two days. He feels like his speech is slightly slurred, his tongue and ipsilateral eye feel "funny." He has a mild right facial droop and vesicles in the right ear canal, which is otherwise unremarkable.

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4. What would be your diagnosis?

Primary Reference:

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Additional References:

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4. Rosenfeld RM et. al., Clinical Practice Guideline: Acute Otitis Externa. *Archives of Otolaryngology-Head and Neck Surgery* 2006; 134, S4-S23.
5. Evans P, Hofmann L. Malignant External Otitis: A Case Report and Review. *American Family Physician*. 1994; 49: 427-431.