

Ear pain

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Rationale

Ear pain or earache can originate from any of the three parts of the ear and may be referred.

The cause of ear pain is usually otologic. In young children who are most frequently affected by ear infections, a good otologic examination is crucial.

Causal Conditions

(list not exhaustive)

- External ear pain
 - a. Infections
 - Otitis externa (e.g., fungal, bacterial)
 - Auricular cellulitis
 - Perichondritis
 - External canal abscess
 - b. Trauma (e.g., frostbite, sunburn, piercings)
 - c. Other (e.g., atopic dermatitis, foreign body, cerumen impaction)
- Middle ear pain
 - a. Infections or inflammation
 - Acute otitis media
 - Serous otitis media
 - Mastoiditis

- Myringitis
 - b. Trauma (e.g., perforation, barotrauma)
 - c. Neoplasms
- Inner ear pain
 - a. Association with vertigo
 - b. Neoplasms
- Referred pain
 - a. Infections (e.g., sinusitis, pharyngitis, peritonsillar abscess, dental disease)
 - b. Trigeminal neuralgia
 - c. Other (e.g., temporomandibular joint dysfunction, thyroiditis)

Key Objectives

Given a patient with ear pain, the candidate will diagnose the cause, severity, and complications and initiate an appropriate management plan. In particular, a careful and complete head and neck examination is required, especially with a normal-appearing ear canal, tympanic membrane, and middle ear.

Enabling Objectives

Given a patient with ear pain, the candidate will

- list and interpret critical clinical findings, including
 - a. features on history and physical examination suggestive of infection; and
 - b. results of an examination of the ear, head, and neck area, looking for other causes of pain;
- list and interpret critical investigations, including imaging (e.g., to rule out mastoiditis/neoplasm) and other investigations relevant to the suspected cause; and
- construct an effective initial management plan, including
 - a. deciding whether supportive measures are all that is required; and
 - b. determining if the cause of the ear pain requires additional investigations, referral, or both.