

Otalgia



Otalgia:It is a pain in the ear

Referred otalgia:it is a pain referred to the ear from lesions of remote or related structures whose nerve supply sends branches to the ear

Sensory innervation include

1-Trigeminal nerve

2-Facial nerve

3-Glossopharyngeal nerve

4-Vagus nerve

5-C1,C2,C3



Ear causes of otalgia include

1-Pinna

- Trauma

- Infected eczema

- Infected sinus

- Infected basal or squamous cell carcinoma

2-Meatus

- Impacted wax

- Foreign body

- Otitis externa

- Allergy

- Tumor



3-Middle ear

- Traumatic perforation
- Otitic barotrauma
- Acute otitis media
- Carcinoma
- Mastoiditis



Causes of referred otalgia

- 1-Tonsillitis
- 2-Nasal polyp
- 3-Parotitis
- 4-Thyroid diseases
- 5-Tuberculosis of the larynx
- 6-Styloid process
- 7-Teeth
- 8-Oral ulceration
- 9-Temporomandibular joint dysfunction
- 10-Myocardial ischemia
- 11-Malignant diseases of the pharynx and larynx
- 12-Pain of nerve origin like herpes zoster oticus and post herpetic neuralgia
- 13-Cervical spine diseases



Tinnitus

Tinnitus: Is an auditory sensation within the ears or in the head in the absence of relevant external signal

Incidence

Tinnitus become much more common with age, peak incidence between 50 and 65 years

Sex incidence 10% of male and 11% of female

Associated condition


Almost every ear disease and cause of deafness can be associated with tinnitus and great majority of tinnitus sufferers have some measurable hearing loss



1-Local cause\

- Presbycusis
- Noise-induced hearing loss
- Meniers disease
- otosclerosis
- Acoustic neuroma

2- General causes

- Cardiovascular diseases
 - Blood diseases
 - Neurological
 - Alcohol abuse
 - Fever of any causes
 - Drugs
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Management

1-History

- Number and nature of sound and their location
- Overall duration, remission and fluctuation
- effect on the individual life
- History of communication difficulties . hearing loss and noise exposure
- Family history of deafness or previous ear diseases
- History of ototoxic drug
- Medical diseases



2-Clinical examination

- Full ENT examination
- Examination of the ear under microscope
- Checking the pulse and blood pressure

3- Investigations

- Audiometric investigation
- Angiography
- Full haematological screen



3- Treatment

- In mild cases with no serious pathology only need reassurance
- Treatment of underlying cause
- Drug therapy; like IV lignocaine,antiepliptic drug,carbamazepine,benzodiazepine and NSAID drugs
- Masking therapy
 - 1-Hearing aid
 - 2-Masker
 - 3-Combined hearing aid and masker unit



Wax\Cerumen

It is a mixture of ceruminous and sebaceous gland secretions mixed with desquamated epithelium in the external auditory canal. It is brownish or yellowish in color due to oxidative causes. Ceruminous glands secrete watery fluid whereas sebaceous gland has fatty secretion. It may become black or greyish when mixed with desquamated keratinized epithelium. Excretion of wax from the external auditory canal is helped by movement of the jaw while eating and talking.



Functions

1-Anti-bacterial action.

2-Traps dust and foreign body

Causes of excessive wax collection

1-Excessive formation

2-Excessive desquamation of the canal wall

3-Less oily sebaceous secretion.

4-Presence of stiff hair

5-Presence of a narrow canal

6-Presence of exostosis.

7-Excessive obliquity of the canal

8-Occupational factors

9-Live in a hot and dry climate

10-More in apprehensive patient.



Diagnosis

Done by otoscopic examination

Symptoms

1-Deafness-present when the canal is completely occluded and occasionally, it is sudden in onset.
It is of conductive type

2-Irritation and itching.

3-Otalgia when there is associated otitis externa

4-Tinnitus and vertigo.

5-Cough reflex-initiated through tympanic branch of vagus.



Treatment

- Syringing for soft wax.
- Waxolytic agents for impacted wax to soften the wax. It can then removed by syringing or suctioning.
- Use a hook or forceps-hooking for firm wax.



