Deafness



Definitions

Impairment of sound perception more than 20 (15) decibel on pure tone audiogram.

Hearing loss

Types:

Conductive hearing loss

Concha
 Ear Canal
 Drum
 Ossicular Chain
 Eustachian Tube



Onductive hearing loss

Exteranal canal pathology :

Artesia



Inflammatory

Acute otitis externa



External canal pathology





External canal pathology

Foreign body



External canal pathology

Tumors:

Osteoma

exostosis





Conductive hearing loss

Tympanic membrane:

► Absent — Perforated

- ► Too thick ——> tympansclerosis
- ► Too thin _____ SOM







Onductive hearing loss

Ossicular chains

Absent & erosion

Fixation (otosclerosis

Disrupted trauma





Onductive hearing loss

EustachianTube dysfunction:









Sensorineural hearing loss

Two types :

- Sensory (the pathology is within hair cells in cochlea)
- Neural (the pathology is with in the auditory nerve and it's connection

Etiologies

Congenital :

Mondeni deformity



Sensorineural hearing loss

Acquired :

Inflammatory

-labyrinthitis ,meningitis





Noise exposure



RIGHT EAR (AD)







Autoimmune

-Cogan syndrome

Ototoxic drugs

-Aminoglycosides groups ,diruiti,....

Trauma Temporal bone fracture

1.Longitudinal fracture





2. Transeverse fracture



Examination

Complete head and neck exam

 Otoscopic / microscopic ear exam of both ears



Clinical testing of hearing

Tuning forks Audiogram battery:

Pure tone audiogram

Speech audiogram

- Impedance
- 1. Acoustic reflex
- 2. Tympanogram
- 3. Volume
- 4. Acoustic reflex decay













THE RINNE TEST

A C > BC (POSITIVE)

AC < BC



pure tone audiogram

Normal hearing



Conductive hearing loss

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pure tone audiogram

Sensorineural hearing loss

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Pure tone audiogram

Mixed hearing loss



Tympanogram



Degree of hearing impairment



Managemnt of deafness Medical management Hearing aids









anagement of deafness

Surgery

A.Myringotomy and ventilation tube Otitis media with effusion





Janagement of deafness Surgery

B. Myringplasty &tympanoplasty in case of CSOM





anagement of deafness

C.Ossiculoplassty





anagement of deafness

BAHA (Bone anchored hearing aid)

Atersia of external canal

-Chronic drainage ear not responding to surgery







Janagement of SNHL

Surgery :

D. Cochlear implant

 prelingual children and postlingual adult

-it pass by the external ,middle and inner ear to stimulate auditory nerve directly

D. Cochlear implant





Thank you

