

MENIERE'S DISEASE

DEFINITION

- Disorder of inner ear where endolymphatic system is distended with endolymph
- Other name : endolymphatic hydrops
- Characterised by
 1. Vertigo
 2. Tinnitus
 3. Sensorineural hearing loss
 4. Aural fullness

PATHOLOGY

- Distension of the endolymphatic system
- Affects
 1. Cochlear ducts
 2. Sacculle
 3. Utricle
 4. Semicircular canals

The dilatation of cochlear duct is such that it may completely fill the scala vestibuli and there is marked bulging of reissners membrane, which may herniate through the helicotrema into apical part of scala tympani

AETIOLOGY

- Either due to increased production (stria vascularis) of endolymph or faulty absorption(endolymphatic sac)

THEORY

- Defective absorption by endolymphatic sac
- Vasomotor disturbance
- Allergy
- Sodium and water retention(excess fluid retained)
- Hypothyroidism
- Autoimmune and viral aetiology

DEFECTIVE ABSORPTIONS BY ENDOLYMPHATIC SAC

- Normally endolymphatic sac to endolymphatic duct
- Experimental obstruction of endolymphatic sac and its duct produce hydrops
- Distension of membranous labyrinth leads to rupture of reissner's membrane and thus mixing of perilymph and endolymph which brings vertigo

VASOMOTOR DISTURBANCE

- Sympathetic overactivity resulting in spasm of internal auditory artery /its branches thus interfering the function of cochlear or vestibular sensorineural epithelium
- Anoxia of capillaries of stria vascularis also causes increased permeability with transudation of fluid and increased production of endolymph

ALLERGY

- In cases of offending allergen , inner ear acts as a shock organ producing excess endolymph
- 50 percent patients with Meniers disease hav concomitant inhalant/food allergy

THANK YOU
