A TOUR OF THE EAR

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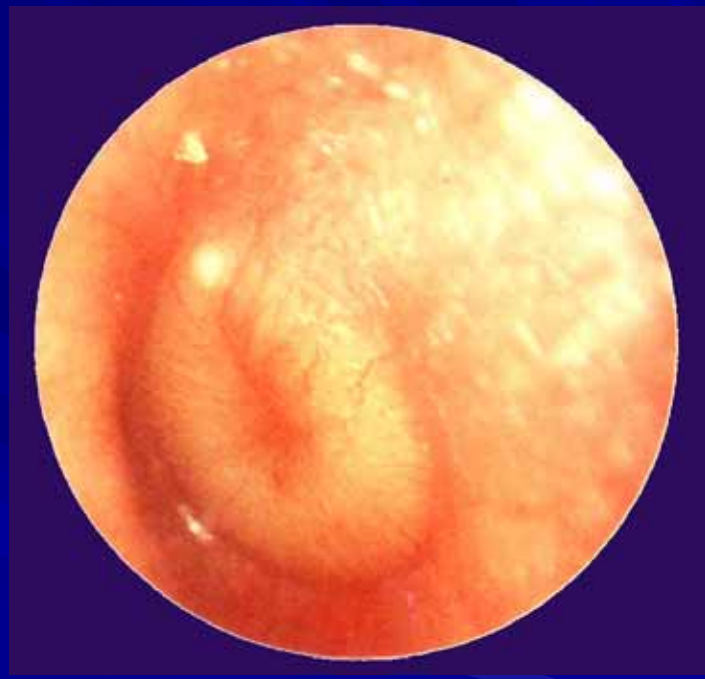
MIDDLE EAR DISEASES

- The 3 common middle ear diseases:
  - ACUTE OTITIS MEDIA
    - PAIN++. No/minimal pus. Children>>adults
  - CHRONIC SUPPURATIVE OTITIS MEDIA
    - OTORRHOEA, chronic, painless
      - Without cholesteatoma
      - With cholesteatoma
      - (TB)
  - MIDDLE EAR EFFUSION/OME/GLUE EAR
    - Hearing loss (mild-mod)/asymptomatic. Children>> adults

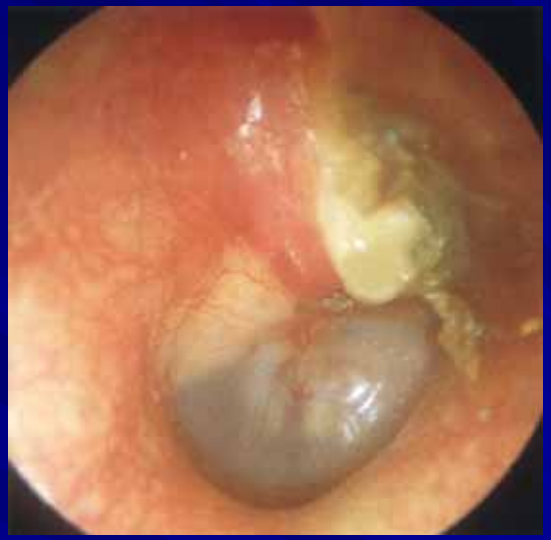
ACUTE OTITIS MEDIA

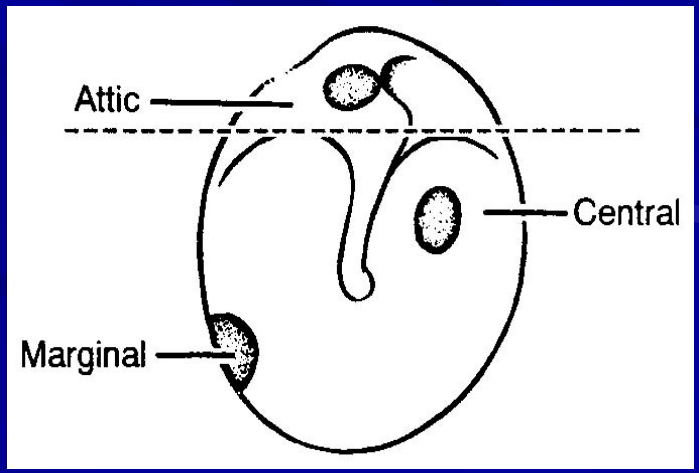
- Easily diagnosed
- URT pathogens
- High dose Amoxil/Augmentin (resistant pneumococcus)
- Analgesia



CHRONIC SUPPURATIVE OTITIS MEDIA

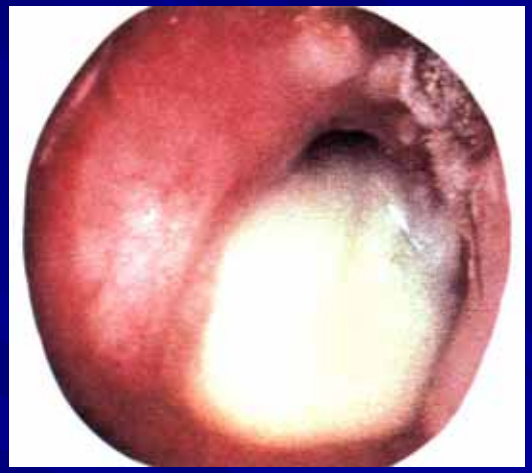
- CLUES TO CHOLESTEATOMA:
  - Squamous epith. deep to level of T.M.
  - Really bad (vrot) smell
  - Attic perforation diagnostic; BUT "central" doesn't exclude
  - Relentless otorrhoea (no response to 3x*R x*)

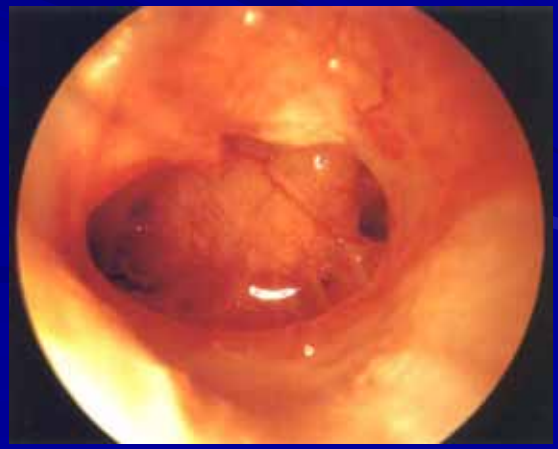




CHRONIC SUPPURATIVE OTITIS MEDIA WITHOUT CHOLESTEATOMA

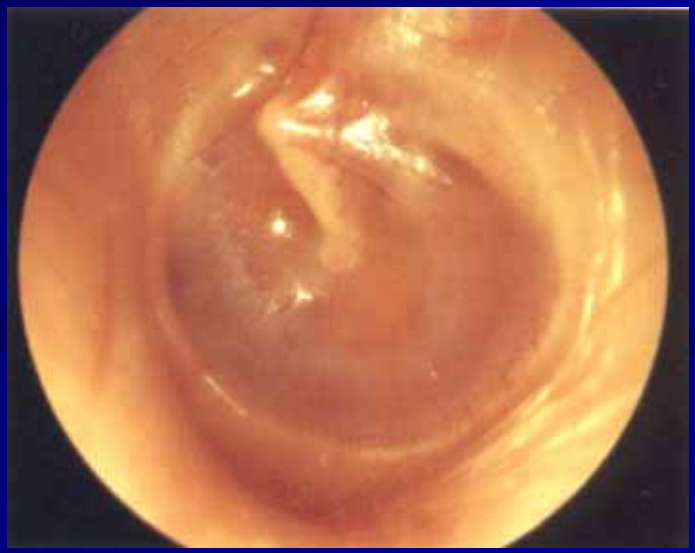
- *Rx :* Local works best:
  - Toilet: syringing/mopping & Antibiotic/Steroid drops
  - Pus swab & repeat
  - Refer ? Cholesteatoma?





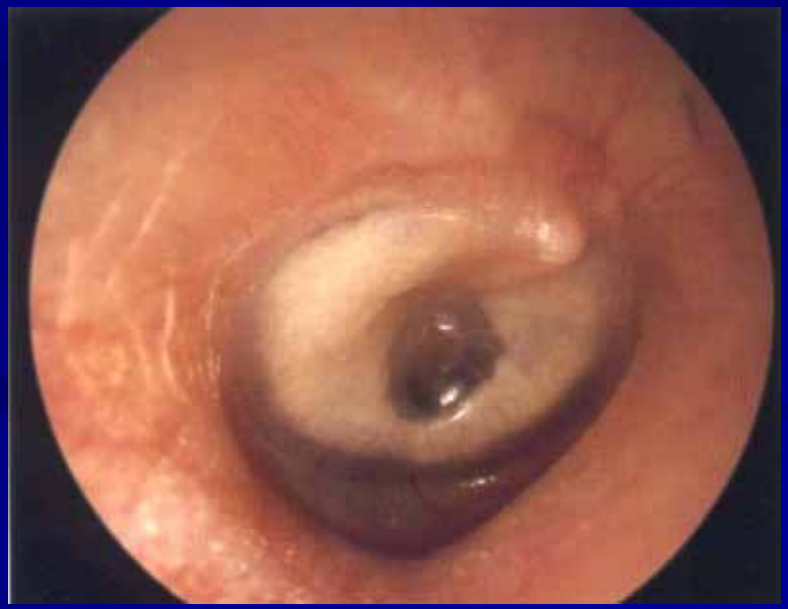
MIDDLE EAR EFFUSION / OME / GLUE EAR

- Children>adults
- History not always obvious: asymptomatic
- Clinical signs difficult to see (child&subtle)
- TM movement useful: pneumatise
  tympanometry



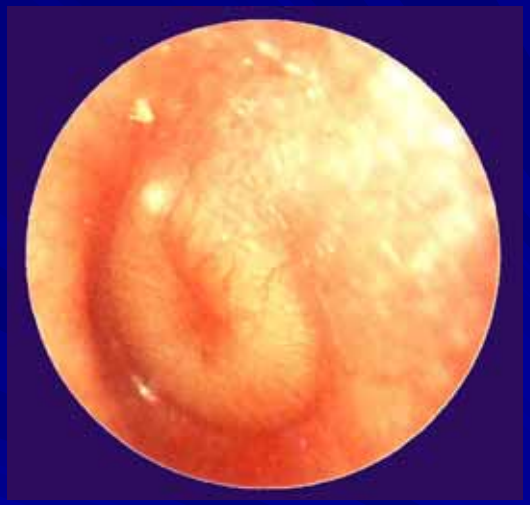
TYMPANOSCLEROSIS

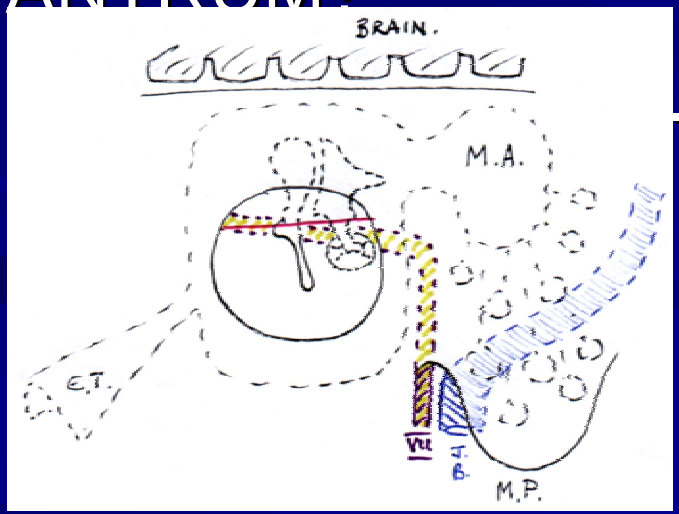
- This is NOT cholesteatoma/disease
- Usually clinically insignificant
- Very low incidence hearing loss

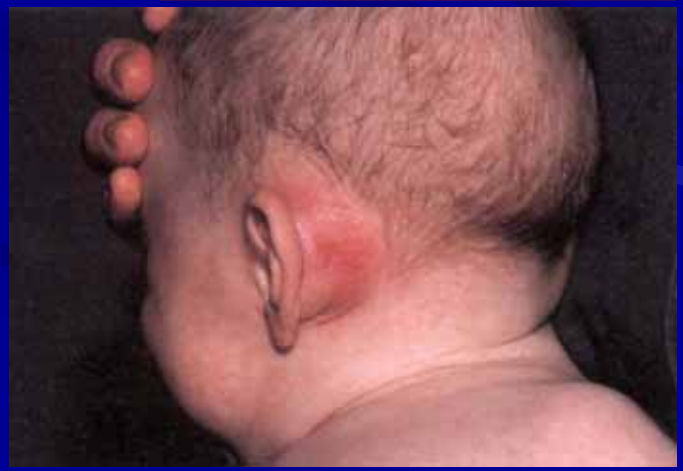


HOW TO DISTINGUISH MASTOIDITIS FROM POSTAURICULAR LYMPHADENITIS

- ?22° to otitis externa or impetigo
- Signs of inflammation over mastoid ANTRUM?
- [illegible]?

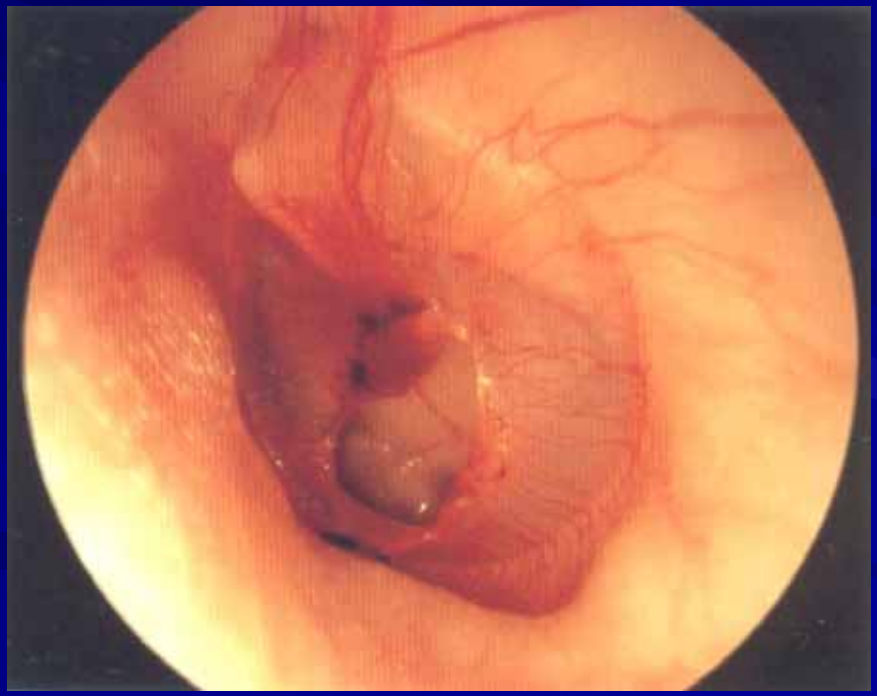






WHEN TO DO NOTHING!

- Traumatic perforation
  d.t. “dry” trauma



5 TIPS ABOUT TINNITUS

- Assess which type it is:
  - “Cicada-like”/Ringing/Buzzing/”Neurophysiological”

    vs
  - Pulsatile (vascular)

    vs
  - Other local clicks/sounds eg Eust T., jaw, palate

5 TIPS ABOUT TINNITUS

- Assess emotional effect on your patient

5 TIPS ABOUT TINNITUS

- PULSATILE TINNITUS:
  - Time with pulse to confirm
  - Assess for general circulatory causes
  - Auscultate for objective tinnitus
  - ? Whether necessary to investigate for local vascular pathology or not

5 TIPS ABOUT TINNITUS

- "NEUROPHYSIOLOGICAL" TINNITUS:
  - Audiogram needed
  - Asymmetric audio: ENT & MRI?
  - No good reason: → ENT
  - If explicable, → Tinnitus Retraining Therapy

5 TIPS ABOUT TINNITUS

- Tinnitus Retraining Therapy
  - Jastreboff model
  - Reinforcement vs suppression
  - Avoid: Stimulants
    Noise
    Silence
    Emotional upset

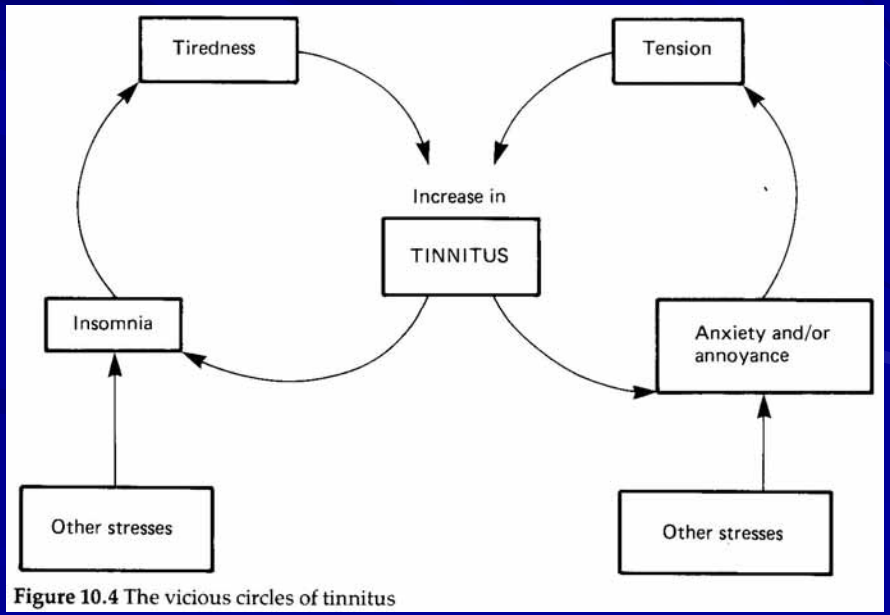


Figure 10.4 The vicious circles of tinnitus

DYSEQUILIBRIUM: VERTIGO/GIDDINESS/DIZZINESS/ETC

- All these vague descriptive terms are used differently and usually indiscriminately by different people

DYSEQUILIBRIUM: VERTIGO/GIDDINESS/DIZZINESS/ETC

- Range of pathology includes:
  - Balance organs of inner ear
  - CNS: cerebellum
    brainstem
  - CVS: BP, ischaemia, syncopes, arrhythmias
  - Neck
  - Metabolic incl hyperventilation syndrome
  - Panic attacks

DYSEQUILIBRIUM: VERTIGO/GIDDINESS/DIZZINESS/ETC

- ALL THE PATHOLOGY IS HIDDEN: HISTORY IS THE BEST DIAGNOSTIC TOOL +++
- GO STEP BY STEP WITH PT. THROUGH HISTORY, AND GET A FEELING
- THEN THINK SYSTEMATICALLY THROUGH THE LIST OF SYSTEMS WITH POSSIBLE PATHOLOGY

DYSEQUILIBRIUM: VERTIGO/GIDDINESS/DIZZINESS/ETC

- CHARACTERISTICS OF INNER EAR DISORDERS:
  - Dysequilibrium, not fainting
  - Definite attacks/episodes
  - “True vertigo”
  - Severe
  - Often with N & V
  - (Other Inner Ear symptoms)

DYSEQUILIBRIUM: VERTIGO/GIDDINESS/DIZZINESS/ETC

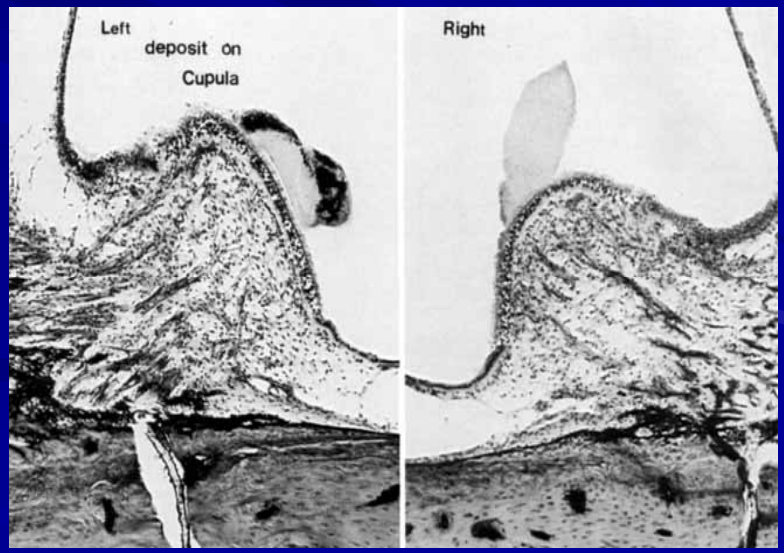
- CHARACTERISTICS OF CNS DISORDERS:
  - More constant feeling
  - Dysequilibrium more vague, not “True Vertigo”
  - Less severe imbalance, can still function

DYSEQUILIBRIUM: VERTIGO/GIDDINESS/DIZZINESS/ETC

- Some characteristic ENT causes:
  - BPPV
  - VESTIBULAR NEURONITIS
  - LABYRINTHITIS
  - (MENIERE'S)

DYSEQUILIBRIUM:

- BPPV:
- Path: otoliths disturb balance organs in SCCs (Post)
- Hist: short episodes rotnal vertigo pptd by sp movets
- Exam: Dix-Hallpike test
  - NB BPPV vs Central
- Rx: Otolith Repositioning Manoeuvre



DYSEQUILIBRIUM:

"Vestibular Neuronitis"

- Path: Labyrinth "knocked out"
- Hist: Severe, contin., debil.. rotnal vertigo+N+V.

  No hearing disturbance.

  Grad. improvet over time.
- Exam: Classical Labyrinthine nystagmus. Continuous, decr. over time.
- Rx: Lab. Sedatives & rest only while severe symptoms.

  Mobilise to encourage central compensation.

DYSEQUILIBRIUM:

Labyrinthitis:

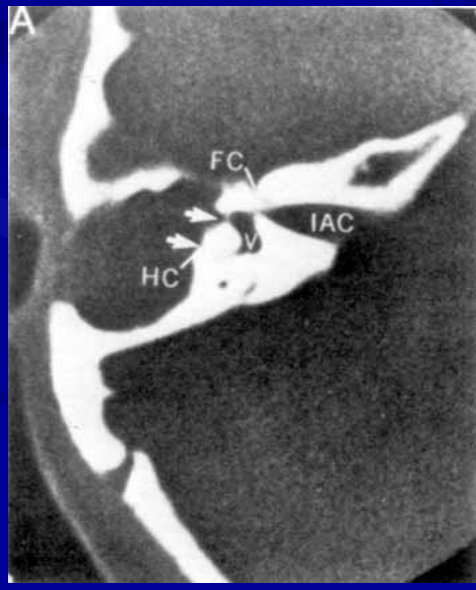
- Path: Viral/Bact inflam/destruction Cochlear & Vestibular labs.

- Hist/Exam: Exactly ~ "V. Nitis", (vertigo, nystagmus etc) but
  - Cochlea (hearing) involved: Hearing loss & tinnitus
  - May see signs of Middle Ear cause

- Rx:

  Bacterial: Rx M.E. infection/cholesteatoma

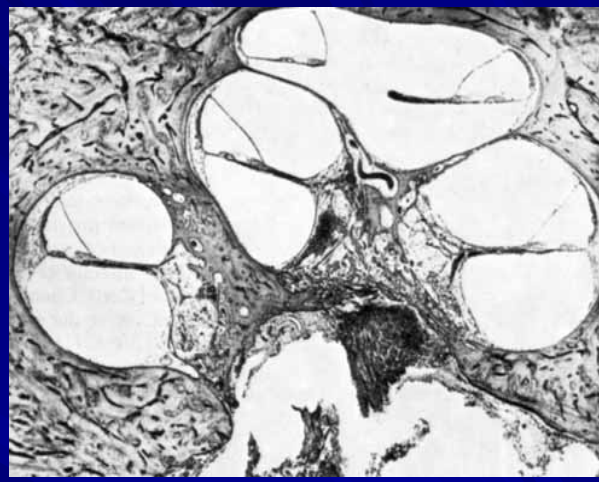
  Viral: Bedrest, monitor, steroids, as per Sudden Sensorineural Hearing Loss, etc

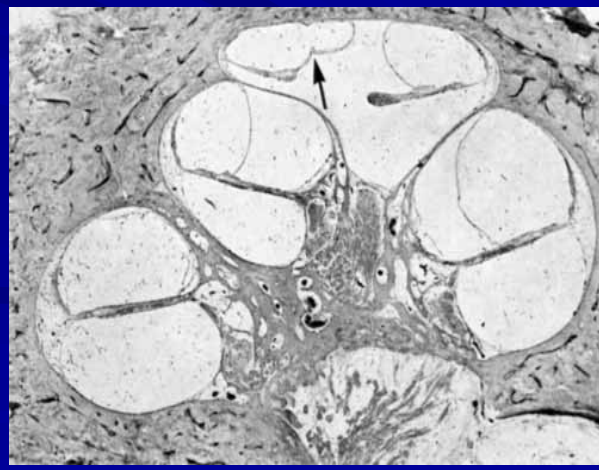


DYSEQUILIBRIUM:

Menière's Disease:

- Path: Endolymphatic hydrops.
- Hist: Classically, episodic
  Vertigo + H Loss + Tinnitus
  +/- sensation of pressure
- Exam: In attack: Lab. Nystagmus
  + H Loss
  Betw. attacks, gradual hearing deterioration.
- Rx: Acute: Lab sedatives
  Prevention: ?Salt restrn., ?diuretics
  Desperation:? Gentamycin instillation





DYSEQUILIBRIUM: The magical Dix-Hallpike Test:

- Classical test for BPPV
- “False +ves” in Central causes
- Classical BPPV +ve D-H Test:
  - Rotnal/Horiz nystagmus to undermost ear
  - Delayed onset (few secs)
  - Direction constant
  - Fatigues on repetition
- False +ves: => Neurologist!
  - Opposite of above
  - Esp if vertical