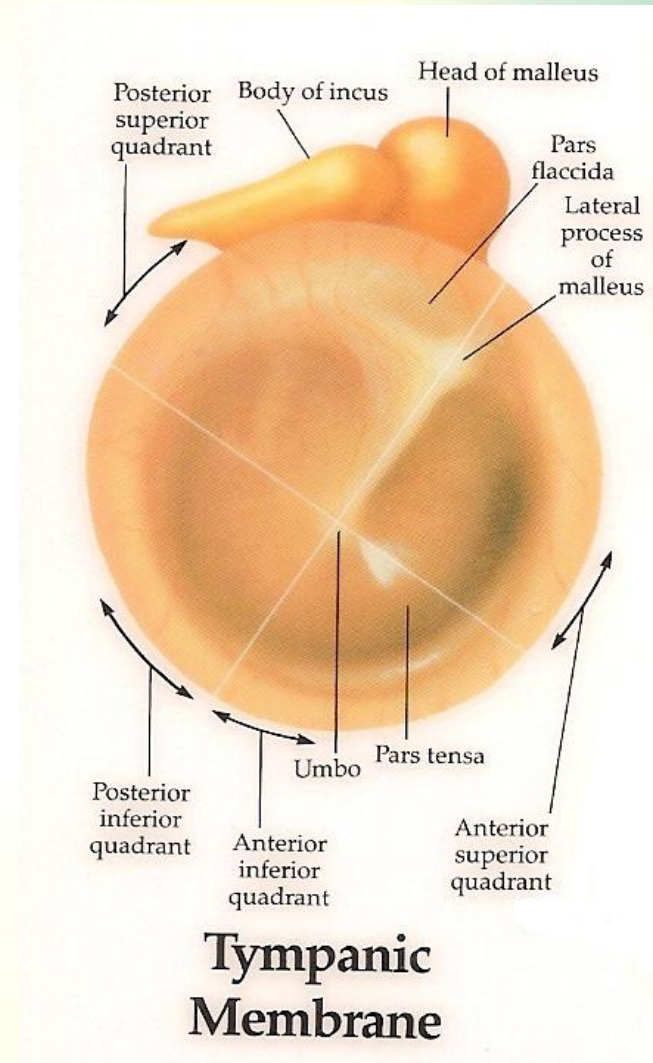
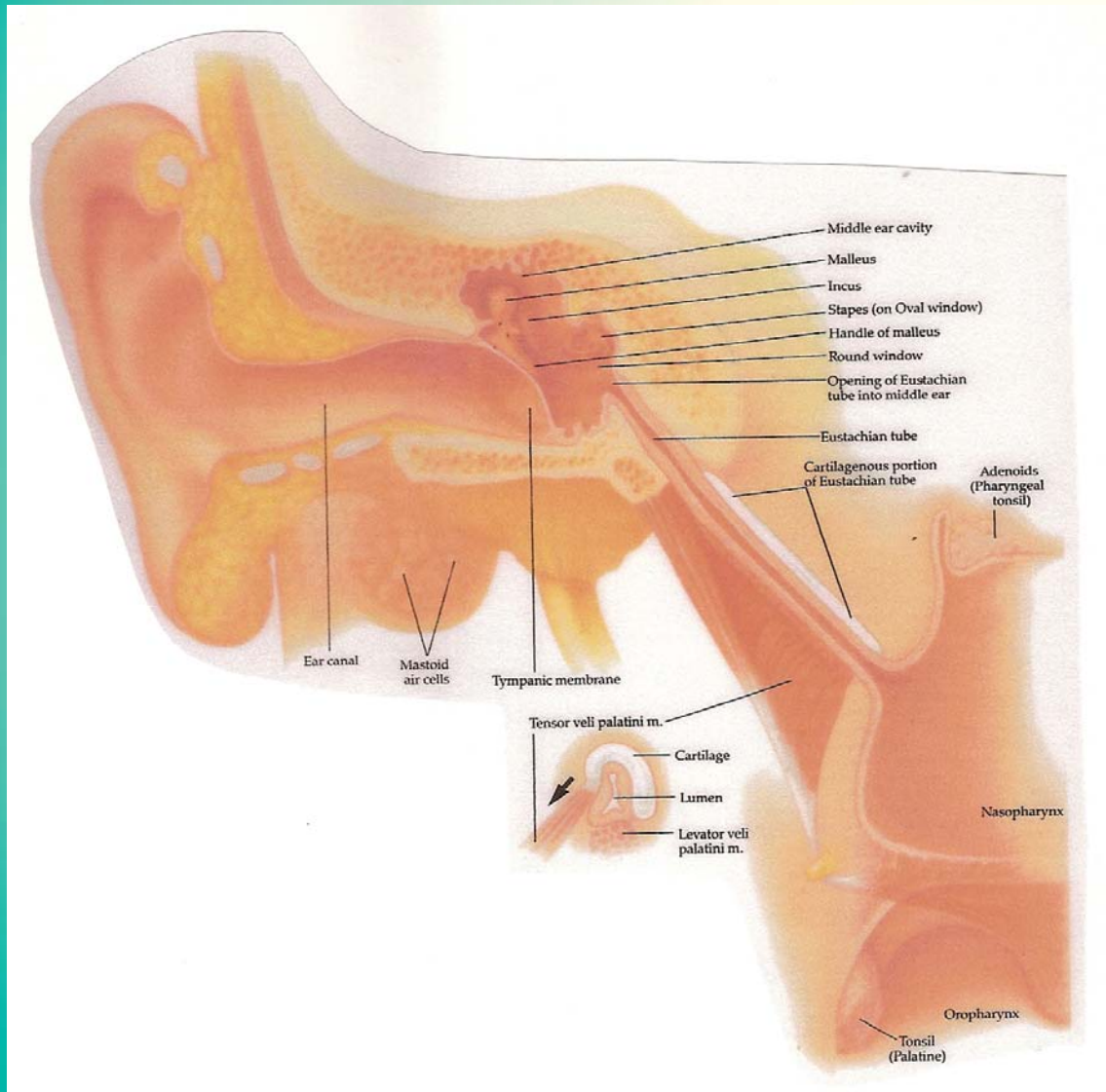




Diseases of the Ear

Hong Kong Baptist Hospital
Director, Ear, Nose & Throat Centre
Dr. Lai Hin Wang



A Symptomatic Approach

Common Ear Complaints

- (1) Otitis – ear pain
- (2) Hearing loss / impairment
- (3) Tinnitus
- (4) Dizziness / Vertigo
- (5) Otorrhea / ear discharge

(1) Ootalgia

Common Causes

- Otitis externa / boil
- Acute otitis media
- TMJ problem / neuralgia
- Foreign body

History

- Duration
- Character / triggering factors
- Proceeding events
- Temperature
- Associated ear symptoms / ? referred pain

Examination

- External ear
- Tender points / area of pain
- Jaw movement – better palpate
- Oral cavity & throat
- Auriscopy, ear canal & eardrums



Treatment

- According to diagnosis
- Infection – topical +/- systemic ATB
- T-M joint problem – chewing habit +/- dental referral +/- NSAID
- It dysphagia +/- odynophagia may need referral
- Herpes zoster – Ramsay Hunt Sx.
remember to look for palate / throat vesicles

(2) Hearing Loss

History

- Unilateral vs Bilateral
- Acute vs Gradual onset
- Proceeding events (e.g. air travel / swimming)
- Other ear symptom
- Prior ear surgery

Examination

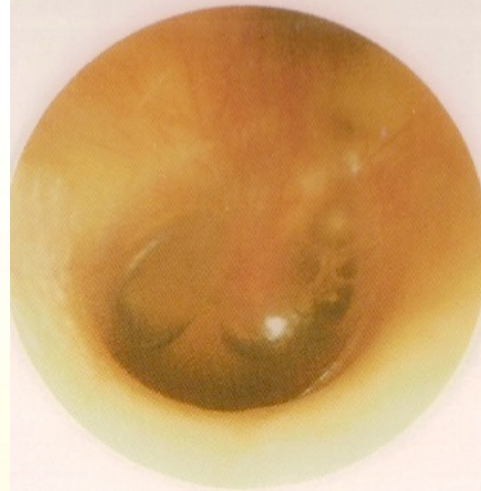
- Auriscopy
- Neck examination
- Tuning Fork test



Secretory Otitis Media

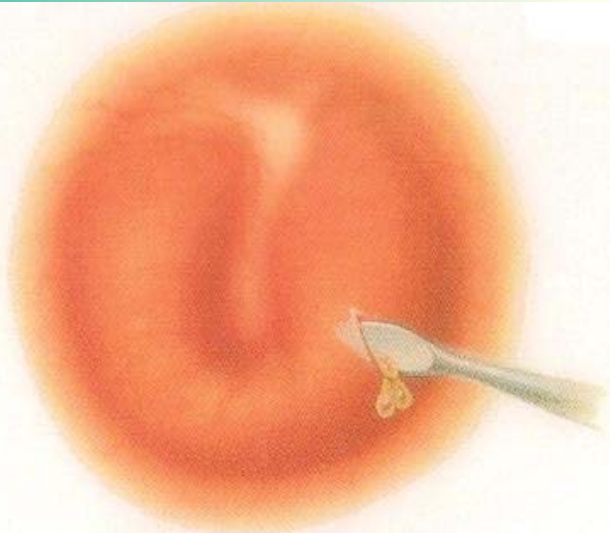


Otitis Media with Effusion



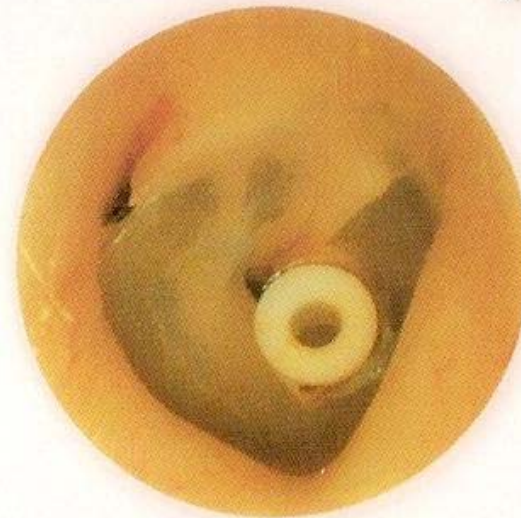
Treatment

- Ear toileting
- Medication
- May need referral if no diagnosis or response

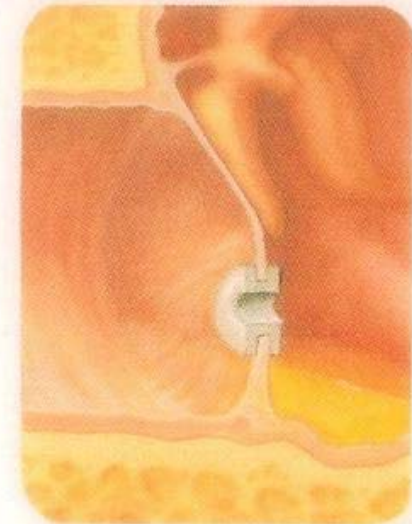


Myringotomy

Myringotomy is an incision through the tympanic membrane.



Ventilation Tube



(3) Tinnitus



Tinnitus if associated with HL manage as hearing loss

- a. Unilateral / Bilateral
- b. Associated symptoms (e.g. epistaxis)
- c. Continuous / periodic
- d. X'ter
- e. Triggering factor (e.g. URI)
- f. Drug history (e.g. Aspirin)

Examination



- Auriscopy
- Fork test
- Neck examination
- Neck / mastoid auscultation

Treatment

- Treat cause
- If persistent may need further I(x) esp. if unilateral

(4) Vertigo / Dizziness



History

- X'tics
- Episodic / Persistent
- Duration
- ? LOC
- Triggering / relieving factor (e.g. Positional)
- Concurrent Medication



Common Causes

- Benign positional vertigo
- Cervical problems
- Side effect of medication
- Vascular problems
- Meniere's disease with symptom triad
- Miscellaneous ear problems

Examination



- General examination including BP/P
- Auriscopy
- Neck auscultation
- Hallpike manoeuvre

Treatment

- Vestibular Sedative
- Treat according to cause
- Specialist referral if indicated

(5) Otorrhea

History

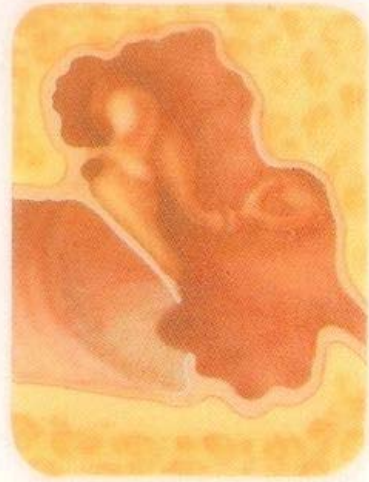
- Unilateral / Bilateral
- X'ter of discharge
- Prior ear instrumentation
- Itchiness
- Associated symptoms

Examination

- General ENT examination + auriscopy +/- ear toilet



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Perforation



Treatment

- Ear cleaning by suction
- Topical ear medication +/- oral ATB
- Water precaution
- No picking
- Referral if persistent or recurrent

Tuning Fork Tests

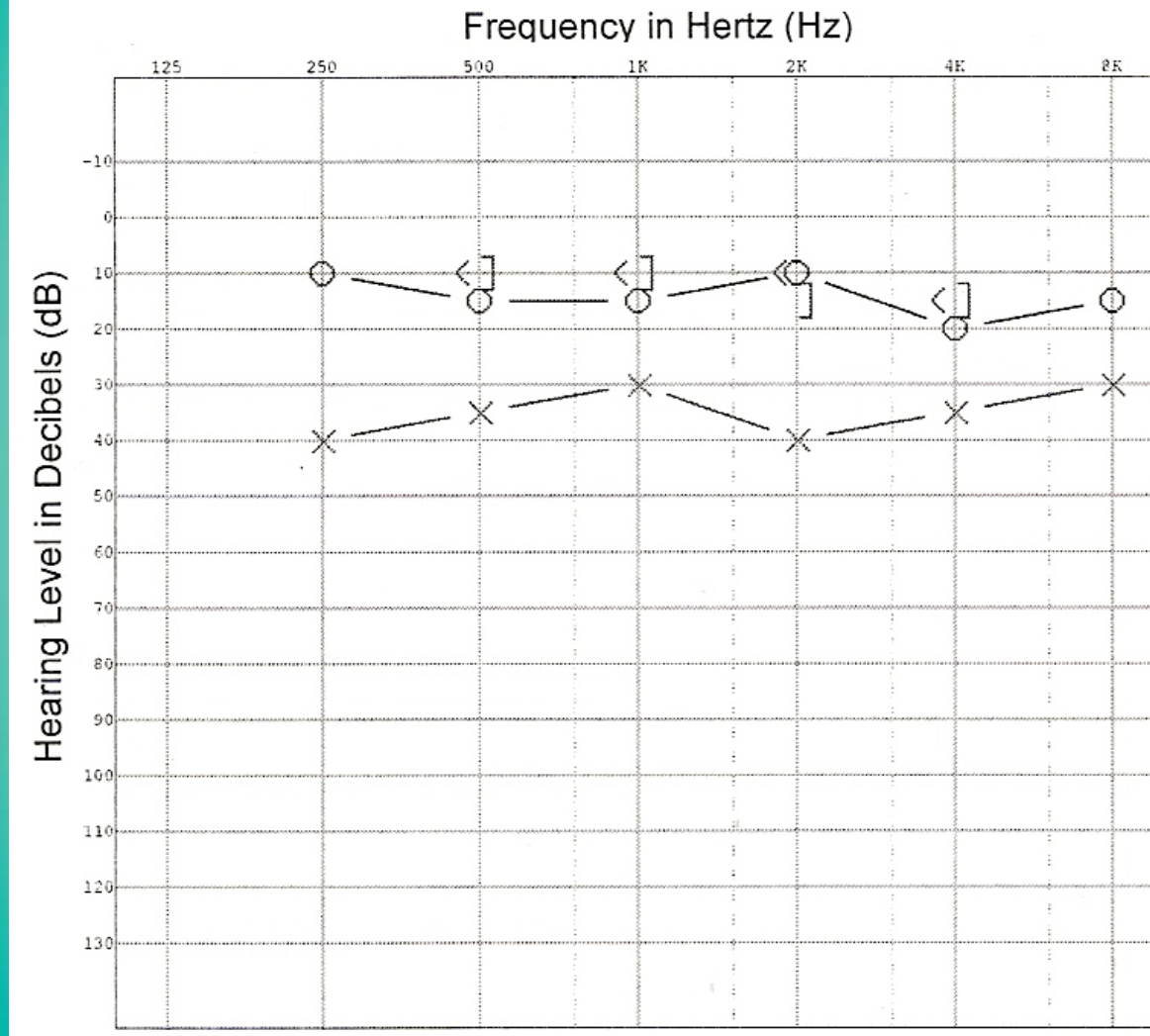


Weber – Midline over forehead / upper incision

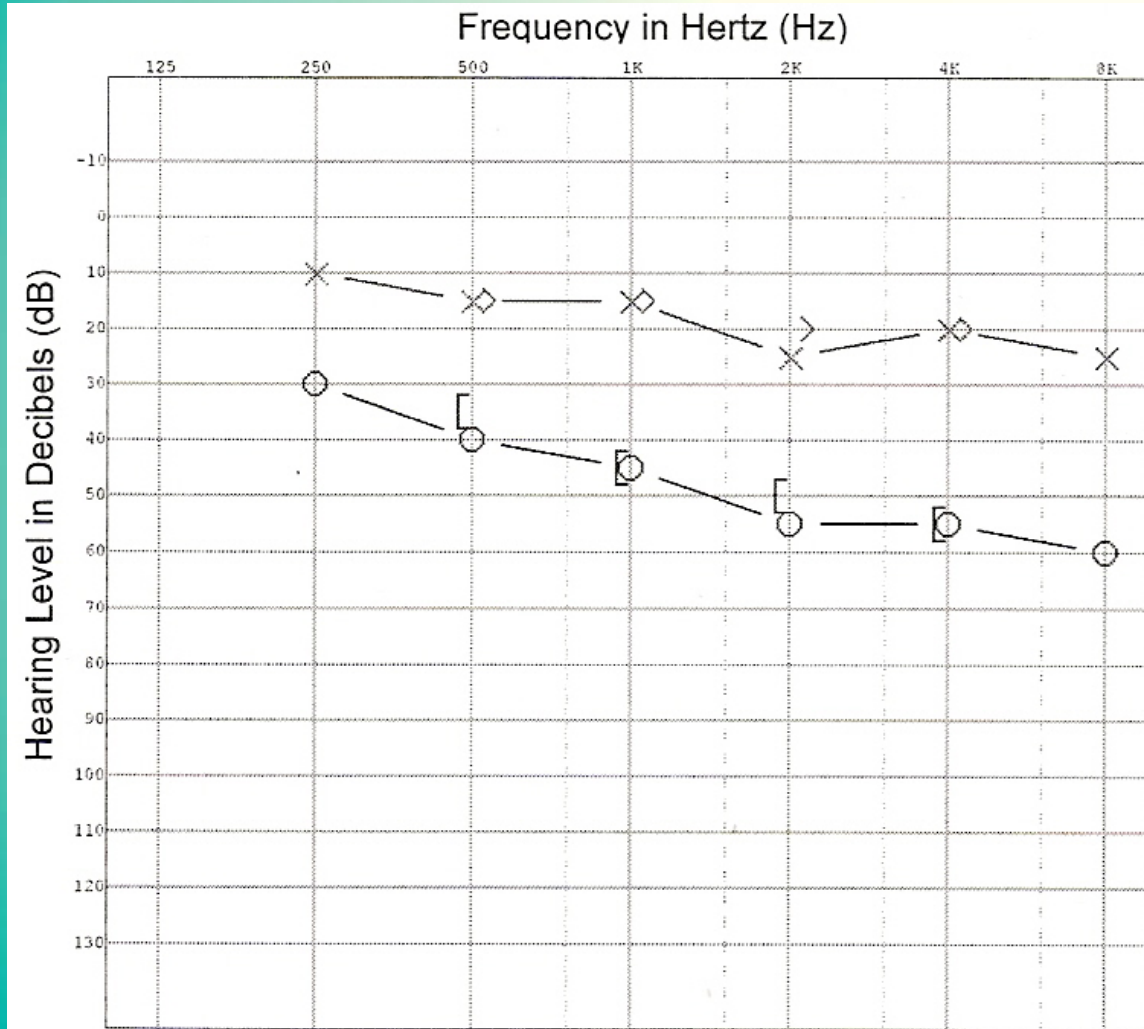
Lateralization – conductive hearing loss on the ear or unilateral severe / profound deafness on the other ear

Rinne – compare bone & air conduction of a single ear

Pure Tone Audiogram



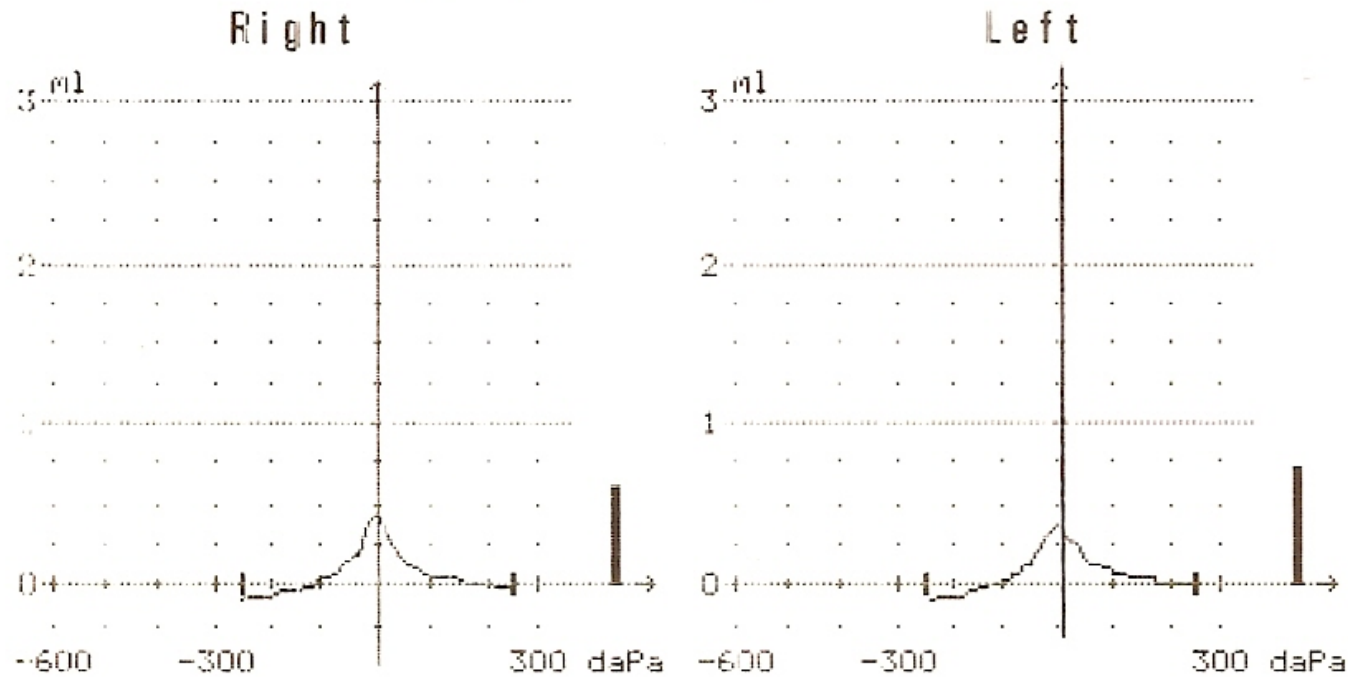
Legend			
	R	Binaural	L
AC Unmasked	○		×
AC Masked	△		□
bc Unmasked	<	^	>
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MCL	M	M	M
UCL	⌘	⌘	⌘
SF Unaided	∅	S	⊗
SF-A Aided	A	A	A



Legend			
	R	Binaural	L
AC Unmasked	○		×
AC Masked	△		□
bc Unmasked	<	^	>
bc Masked	[]
MCL	M	M	M
UCL	⌌	⌌	⌌
SF Unaided	∅	S	⊗
SF-A Aided	A	A	A



Tympanogram



Ear Volume 0.61 ml
Compliance 0.43 ml
Pressure 2 daPa
Gradient 0.26 ml

Ear Volume 0.74 ml
Compliance 0.38 ml
Pressure -3 daPa
Gradient 0.20 ml

~ End ~

Thank You!