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Bay Audiology

Friday, August 12, 2016

(Room 9)

14:00 - 14:55 WS #29: The Effect of Hearing Loss on Your Elderly Patients. Cochlear Implants?

15:05 - 16:00 WS #39: The Effect of Hearing Loss on Your Elderly Patients. Cochlear Implants? (Repeated)

Treatment of Hearing Loss in Your Elderly Patients



Karen Thomas: Audiologist

Disclosure Statement

I am employed by Bay Audiology, which is part of the Amplifon Group. We are independent of any Hearing Aid Manufacturer.

CME sessions will not promote products, brands or incentives, and will give a balanced view of all therapeutic options available for good quality patient management.

Information presented is unbiased and based on scientific evidence.

The 7 wonders of the modern world

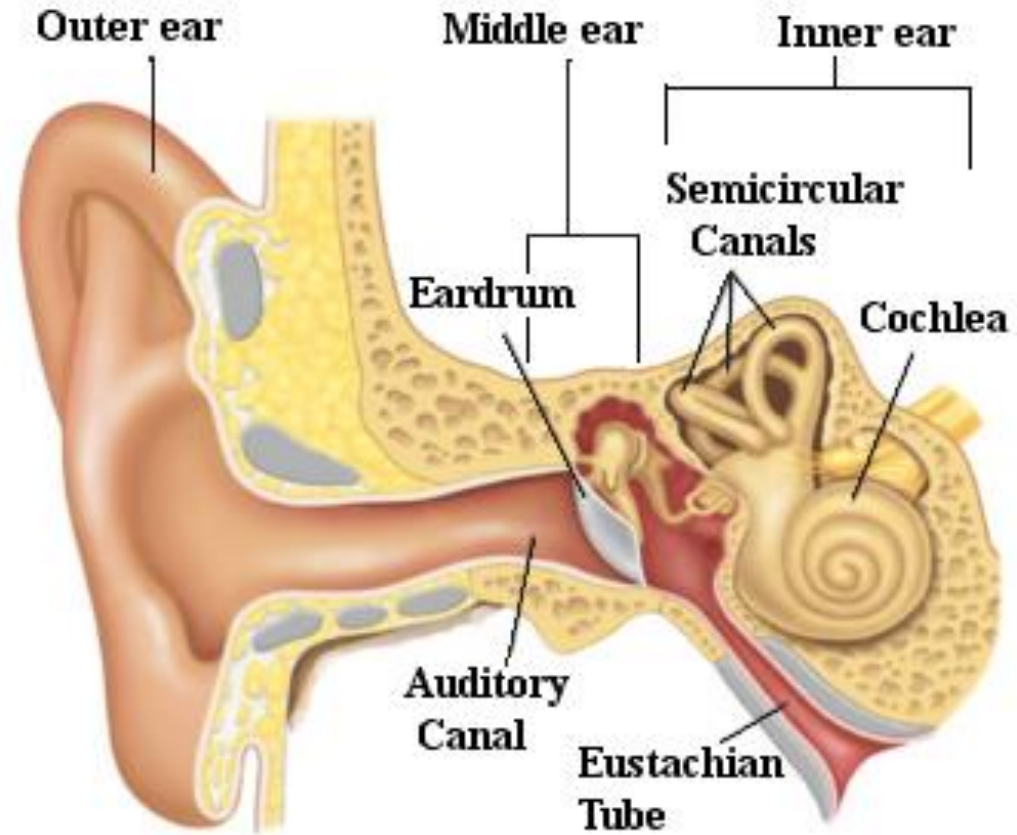


The 7 wonders of the modern world

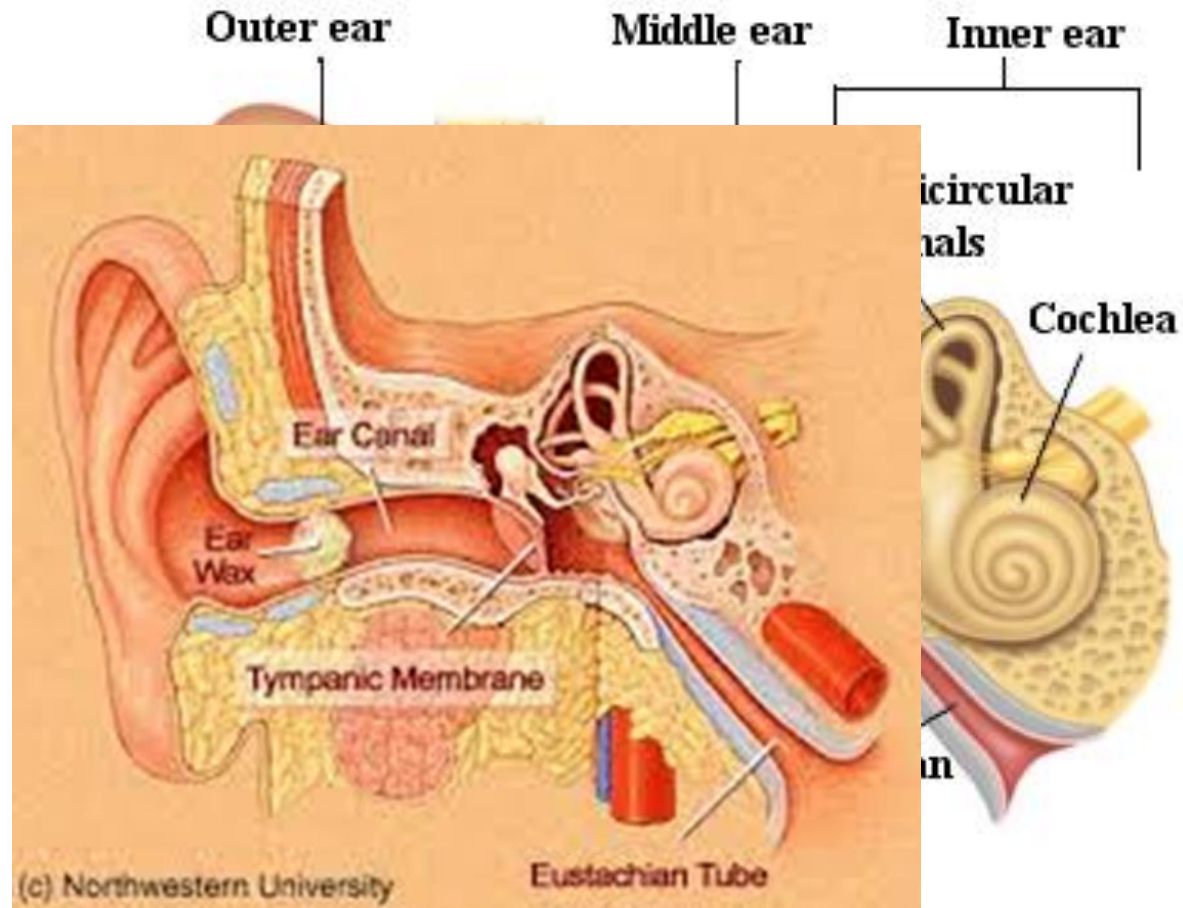


to see
to hear
to touch
to taste
to smell
to laugh
and to love

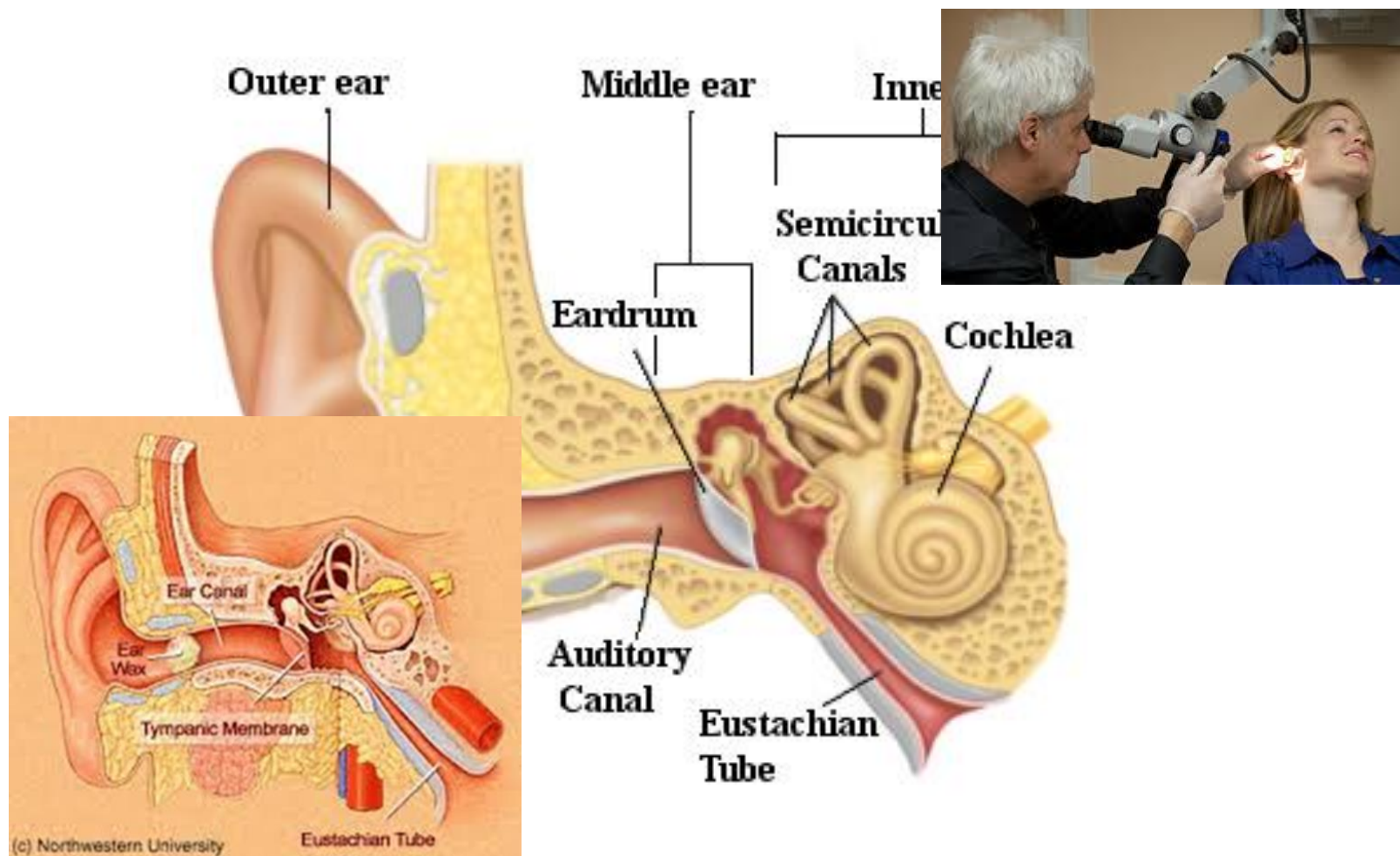
The Hearing System



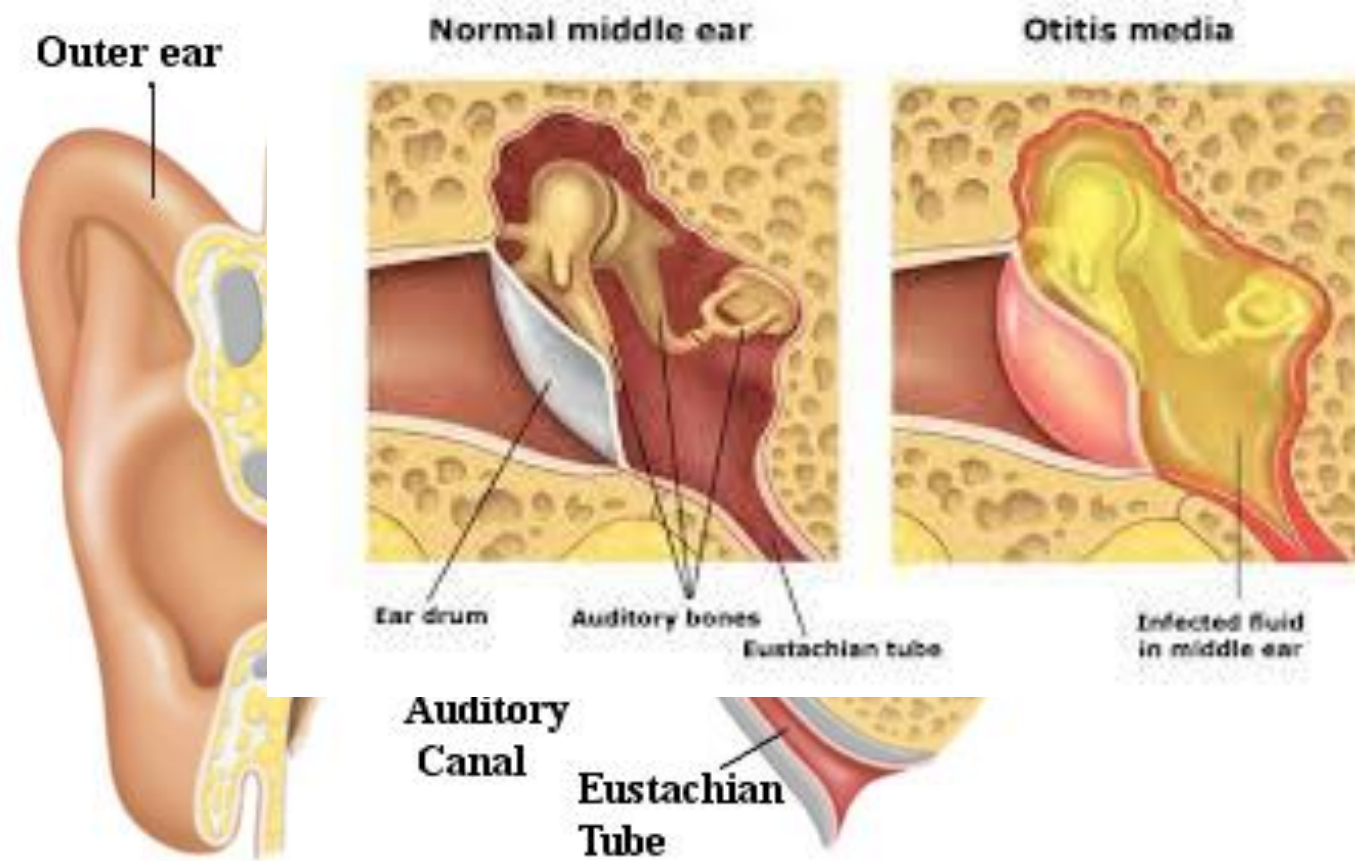
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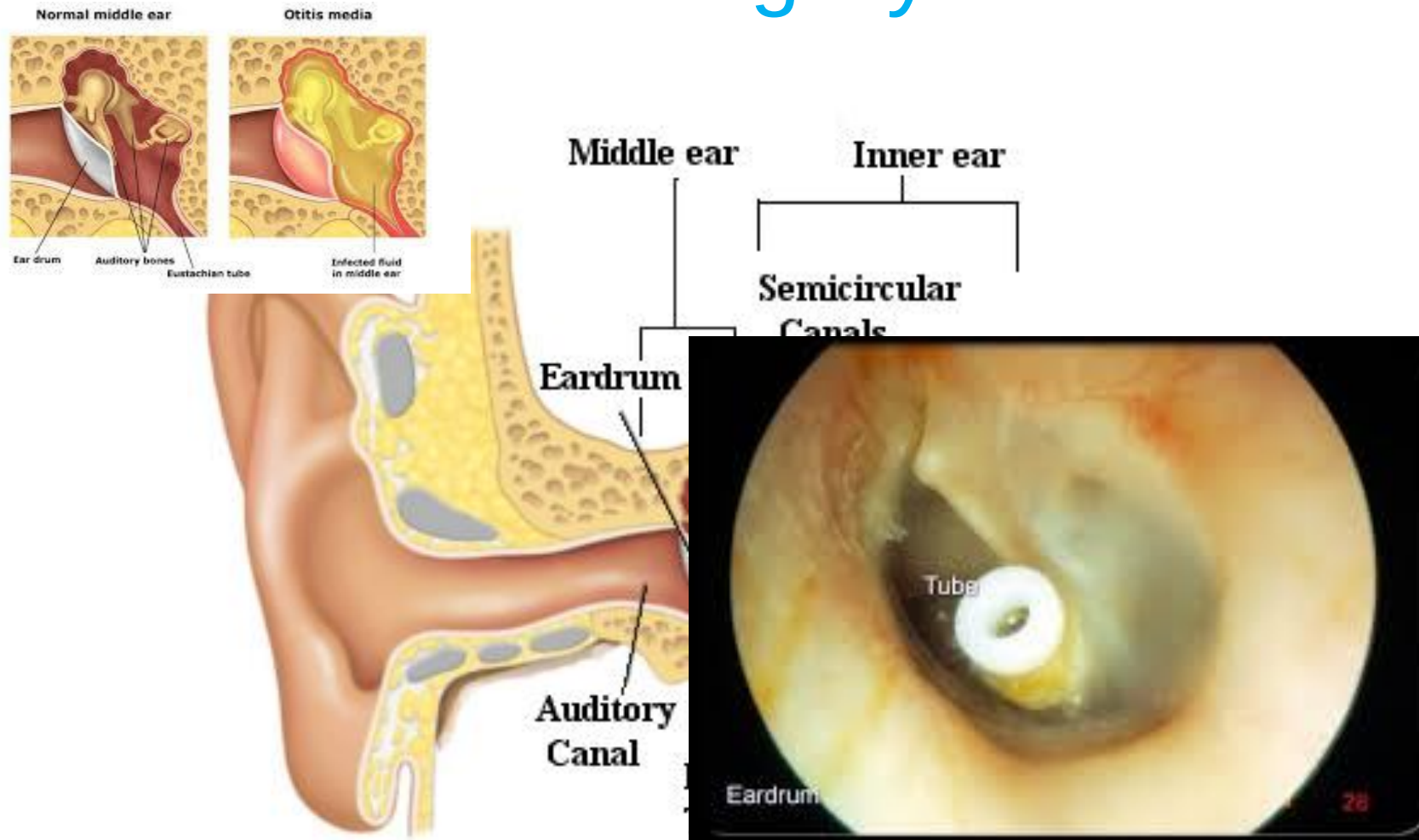
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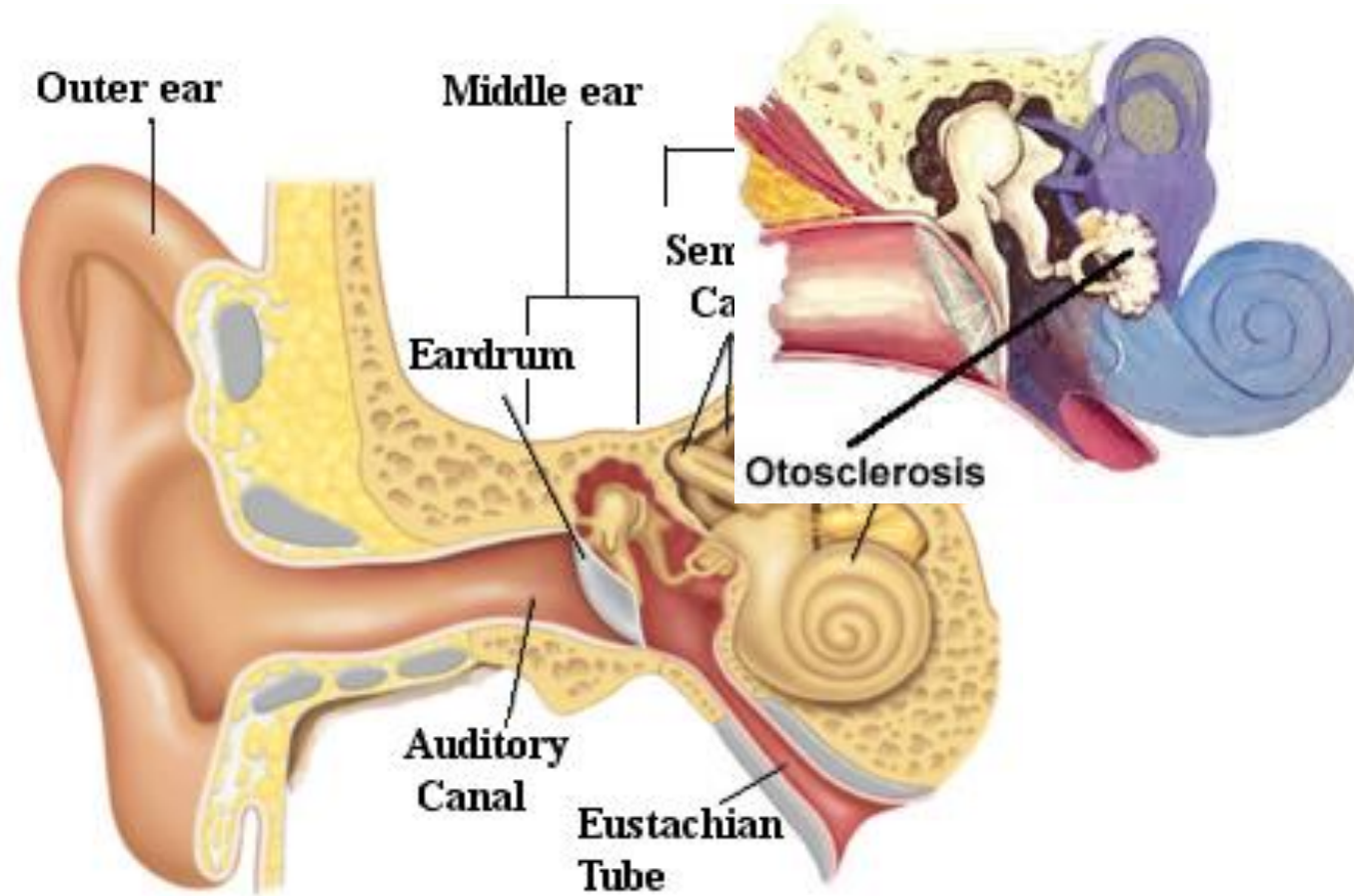
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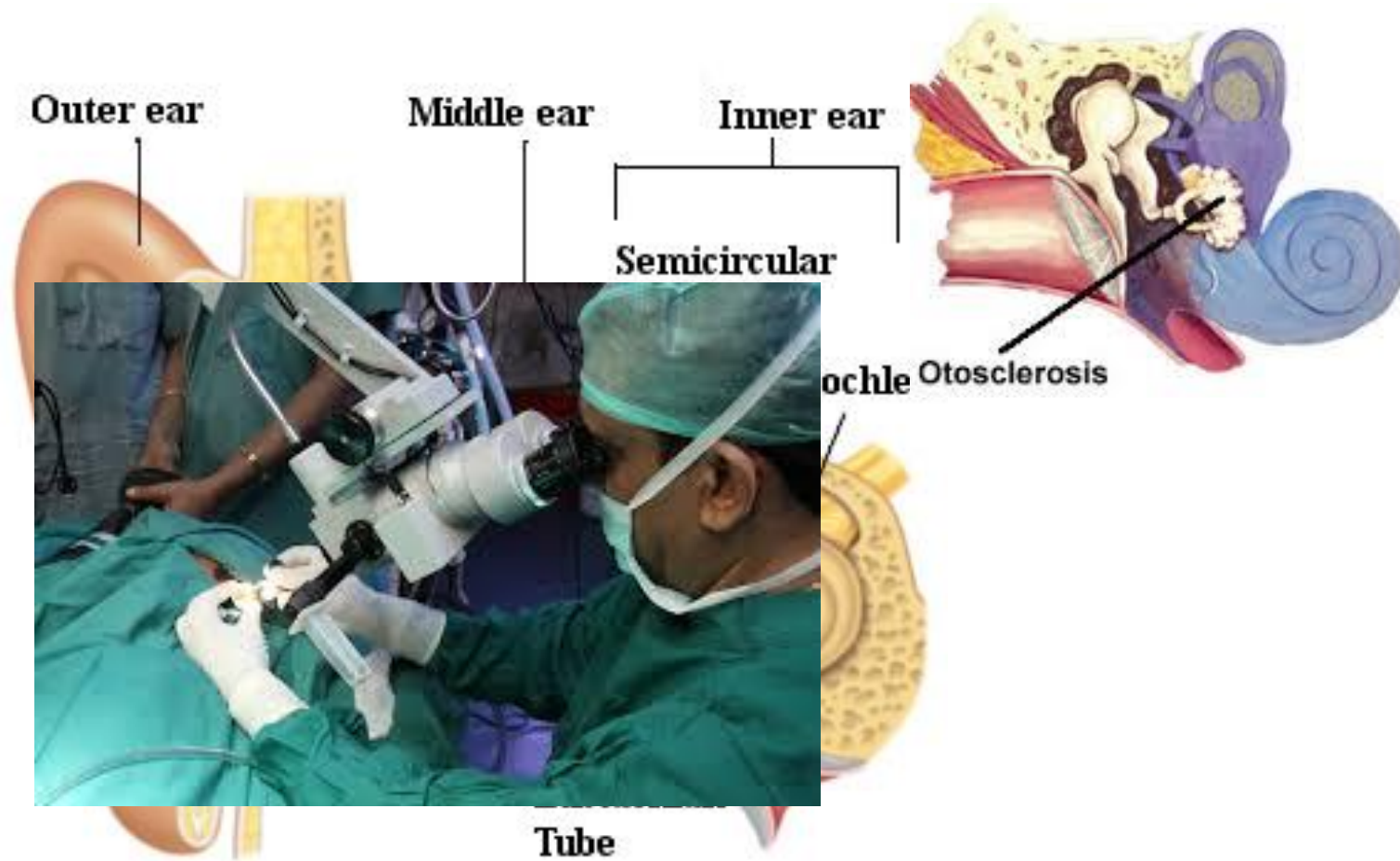
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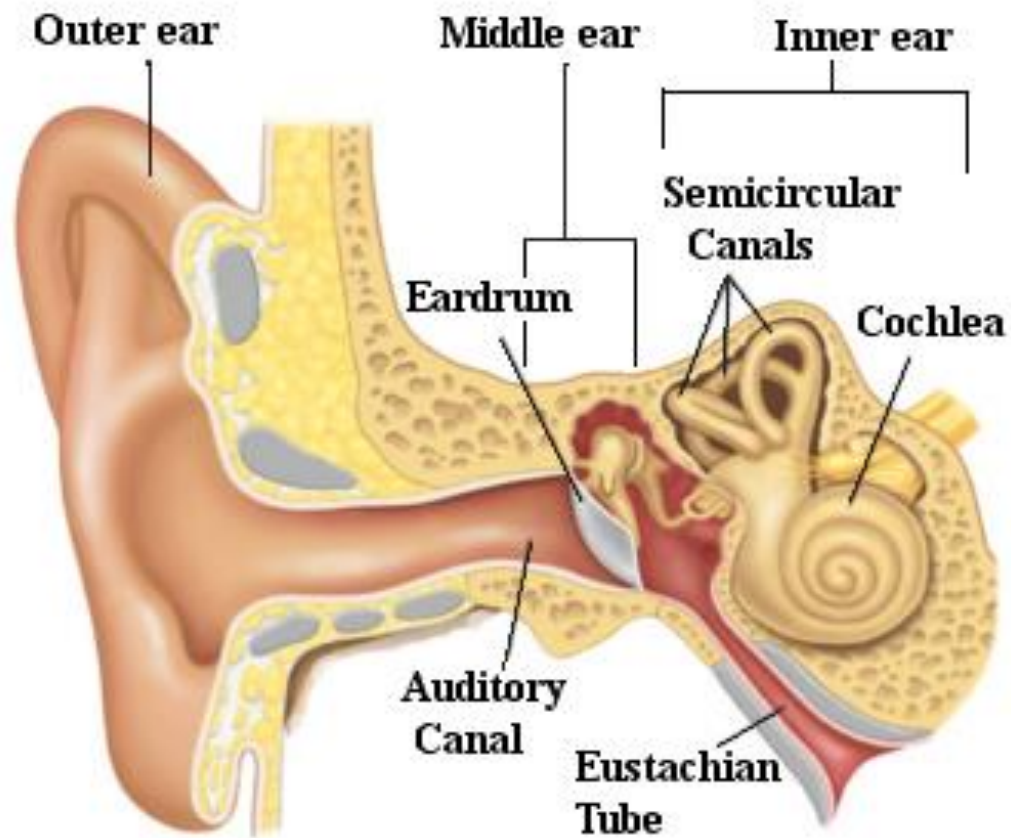
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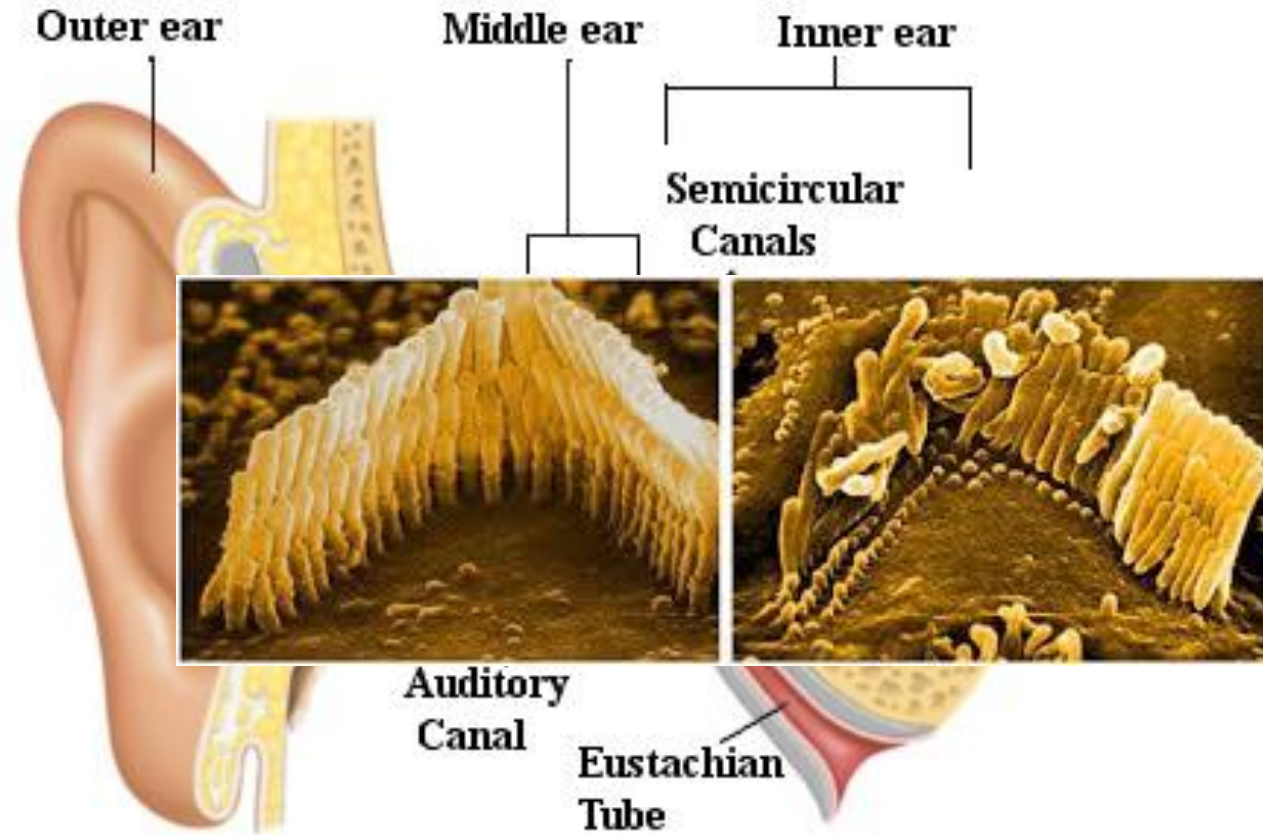
The Hearing System



The Hearing System



The Hearing System



Causes of Permanent Hearing Loss

- Hereditary
- Ototoxic drugs
- Virus
- Noise Induced Hearing Loss (NIHL)
- Aging/Presbycusis (ARHL)

Main types of Sensorineural Loss

1. Presbycusis

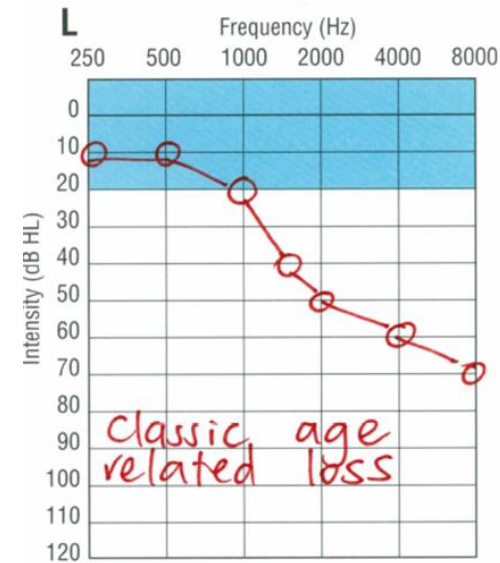
- Age Related and wear & tear
- Hair cell damage, high frequency hearing affected first
- Bilateral

Affects

- Clarity/speech intelligibility
- Volume

People with hearing loss...

- Over 65 – 2 in every 3 (67%)
- Over 80 – 8 out of 10 (80%)



Main types of Sensorineural Loss

1. Presbycusis

- Age Related and wear & tear
- Hair cell
- Bilateral

Affects

- Clarity/sp
- Volume

People with

- Over 60
- Over 80



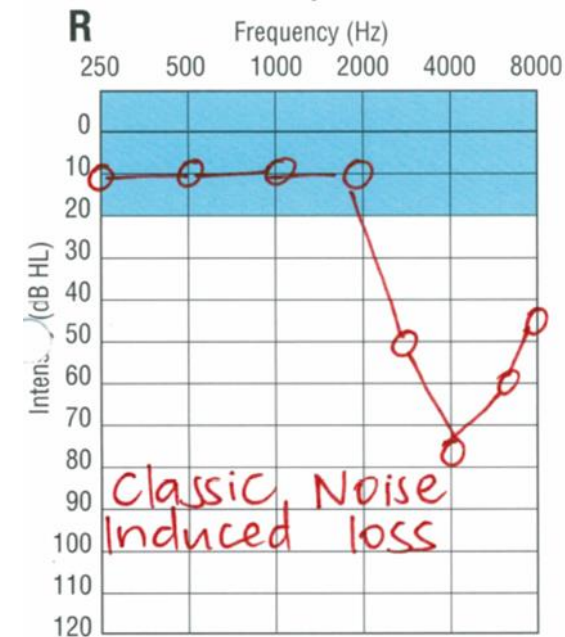
ated first



Main types of Sensorineural Loss

2. Noise Induced Hearing Loss (NIHL)

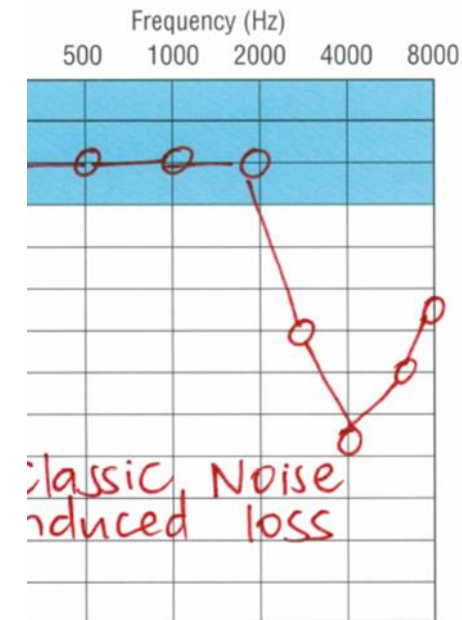
- Mainly high frequencies
- Bilateral/Symmetry (?)
- Historically difficult to correct
- Clarity/Speech intelligibility
- Not Volume

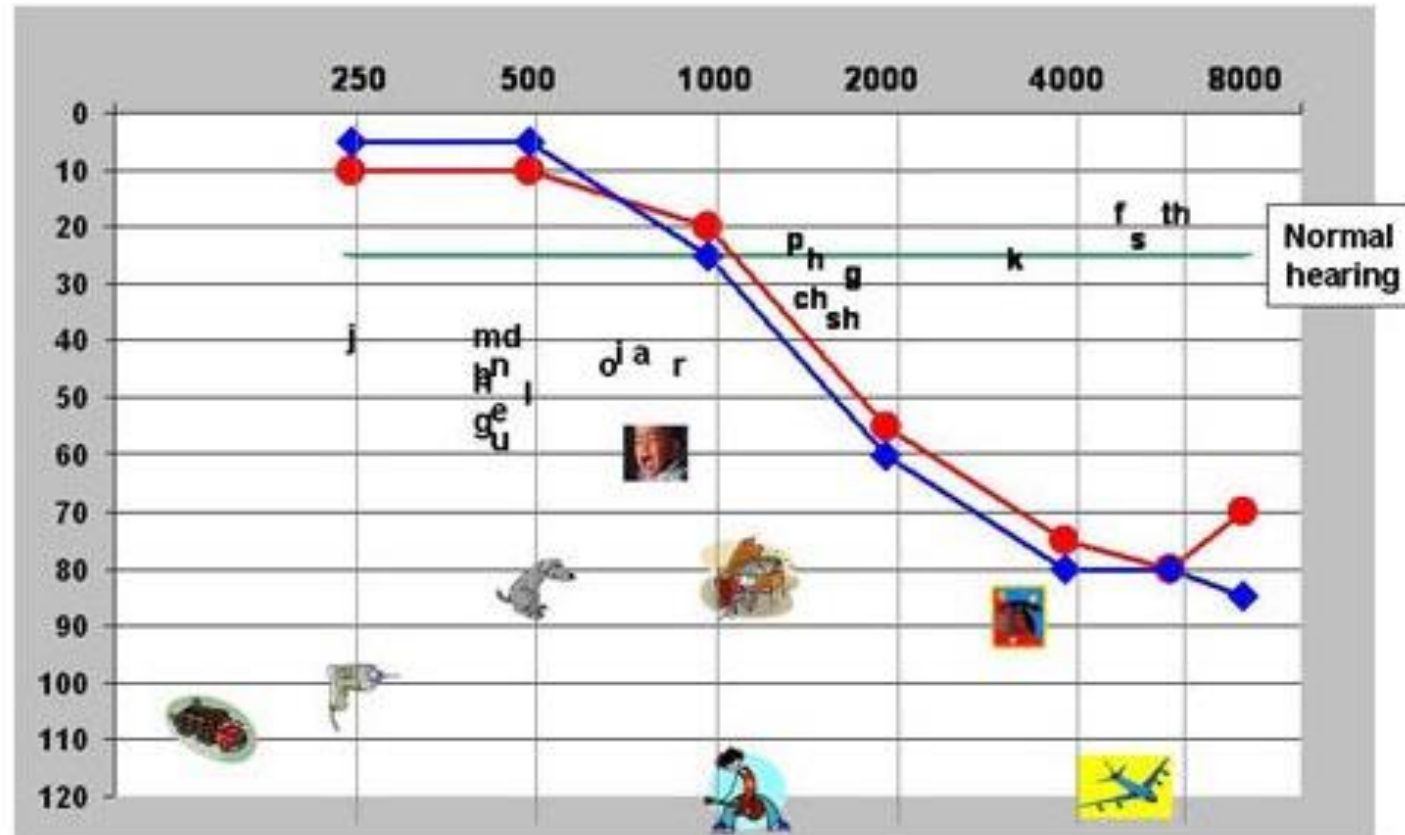
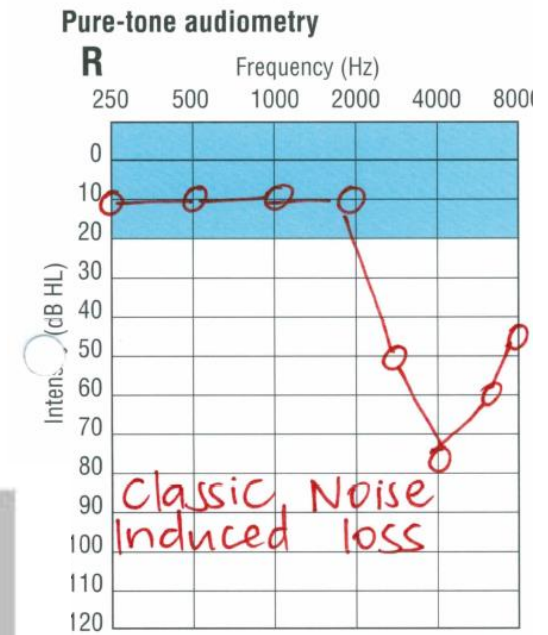
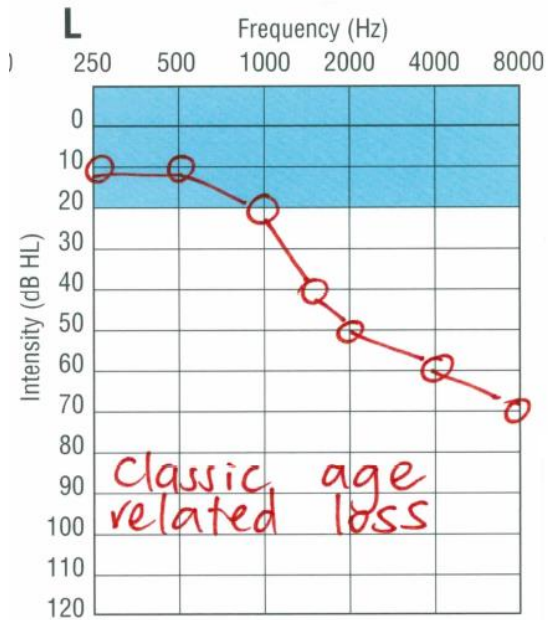


Main types of VUVUZELA RECYCLING LOSS

2. Noise Induced

- Mainly high frequency
- Bilateral (?)
- Historically difficult
- Clarity/Speech in
- Not Volume







A
O B
T C L
E L S C
L O B T H
P O A S T E
P T H D F C L

Quiz på TV om uba,
Nexø, fordsæler og hisky

The Impact of Hearing Loss

Communication

Cognitive

Quality of Life & Overall functioning

Depression & social isolation

Social and Emotional decline

When someone in the family has a hearing problem, the whole family has a hearing problem.

Dr. Mark Ross

Blindness separates people from things,

Deafness separates people from people.

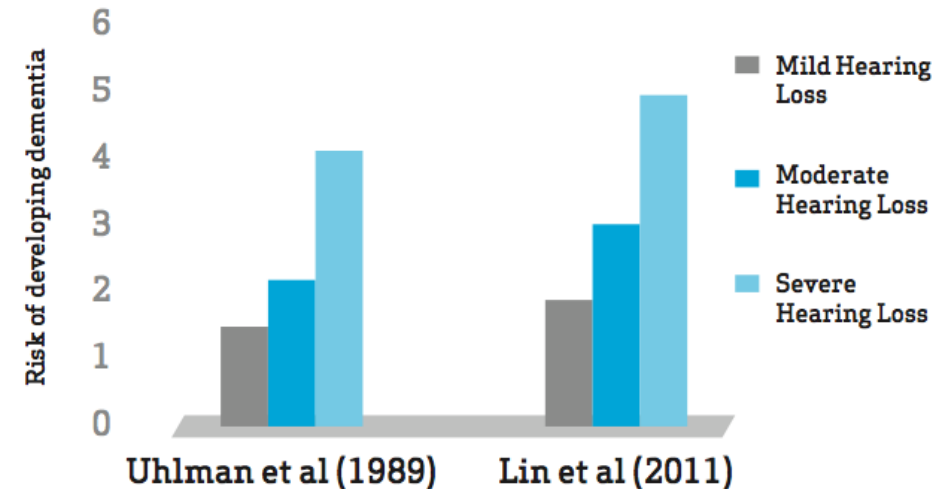
Helen Keller

Untreated Hearing Loss

Older patients with hearing loss significantly more likely to develop dementia over time compared to those with normal hearing.

- Hearing loss leads to social isolation?
- Increased cognitive load due to listening effort?

Risk of developing dementia in relation to hearing loss
(Uhlmann et al, 1989 & Lin et al, 2011)



Hearing Therapy

Listening strategies

I CAN'T
HEAR YOU
IF YOU DON'T...

I CAN'T HEAR YOU
IF YOU MIMBLE

I CAN'T HEAR
YOU IF YOU
COVER
MOUTH.

FACE ME.

Assistive Listening Devices

Amplified telephones



Wireless headphones for TV



Integrated home systems



Amplification through Hearing Aids



In the Canal



In the Ear



Open Fit

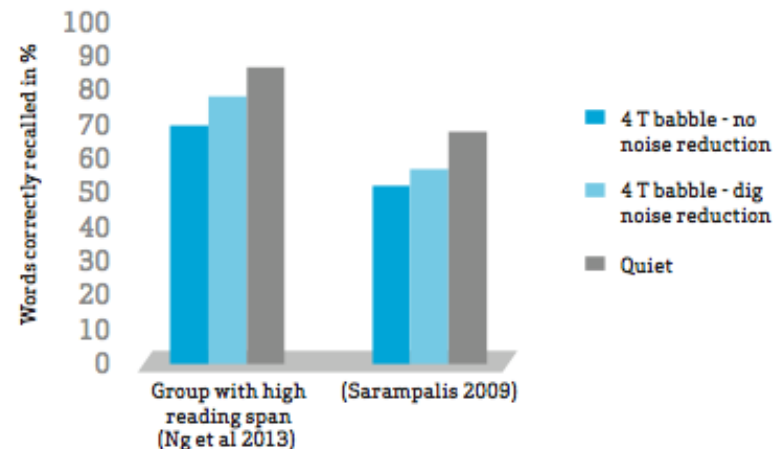


Behind the Ear

Can amplification prevent or reverse cognitive decline?

- Hearing aids
 - Have a positive effect on overall quality of life,
 - Help reduce isolation,
 - Reduced cognitive load.

Impact of digital noise reduction in word recall task (Ng et al, 2013 / Sarampalis 2009)



Research supporting positive long term effect of amplification on cognitive functioning is ongoing

Advances in Hearing Aid Technology

- Smaller, lighter
- Better feedback management (SQUEALING)
- Faster processing
- Better performance in crowds and background noise
- Water and dust resistance
- Wireless - Mobile phones, TV
- CROS and BiCROS systems

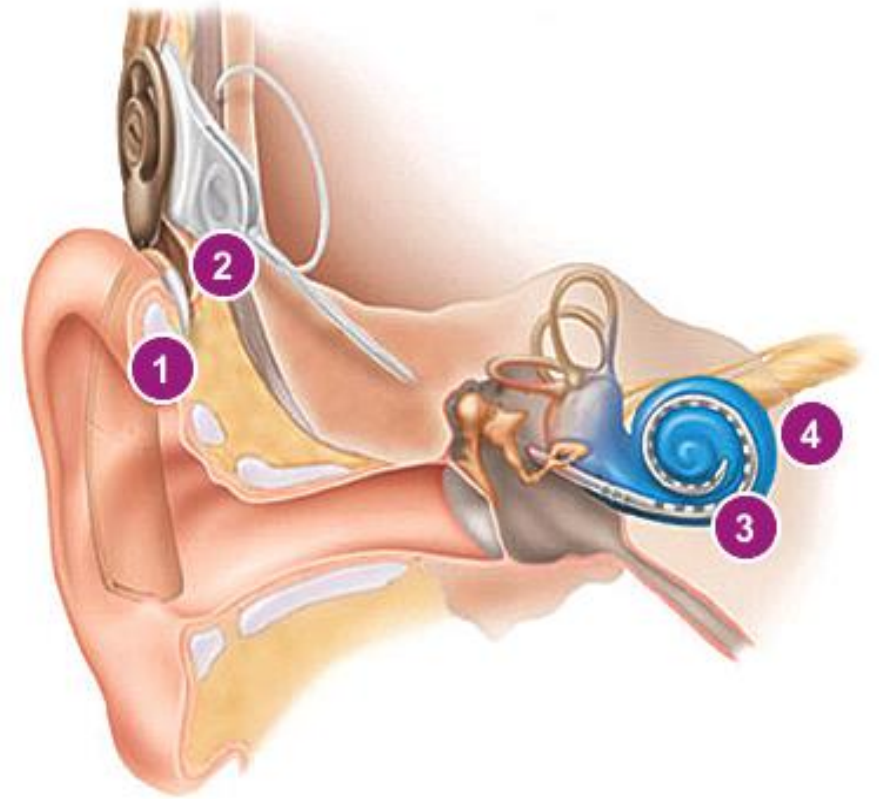


Funding options for Hearing Aids

- MoH Hearing Aid subsidy (Enable)
- MoH Funding(Enable)
- War pensions (Veterans Affairs NZ)
- ACC
- WINZ loan (Work and Income)

Cochlear Implants

- Medical device with external (Speech Processor and Transmitting Coil) and internal parts
- Direct stimulations of the auditory nerve



Eligibility Criteria

Adults:

- Severe to profound bilateral hearing loss
- Limited benefit from hearing aids – must be a ‘good’ hearing aid wearer
- Eligible for publically funded health services
- Assessment tests
 - audiological, scans, psychological
- **No maximum age criteria**

Funding of Cochlear Implants

Full Funding

- Assessment, device, surgery, audiology services, maintenance and support, rehabilitation, replacement
- Does not include batteries, repairs and spare parts for speech processors
- Only 1 implant is funded for adults (except in cases of meningitis)

Partial Funding is also available in some cases

Who Can Refer

- NCIP www.ncip.org.nz (Taupo North)
- SCIP www.scip.co.nz (Rest of NZ)

Referrals can be made by:

- ENT specialists
- Audiologists
- Advisors on Deaf Children
- GPs

The myths about hearing loss

Also called...

**IT'S NOT MY HEARING THAT IS
BAD**

“My wife is very softly spoken.”





“My husband mumbles.”

“It’s the children of today, they speak so fast...”



“I hear very well. I hear well when its just me
and one person.”



“That’s normal for my age, so I don’t really have to do anything about it.”

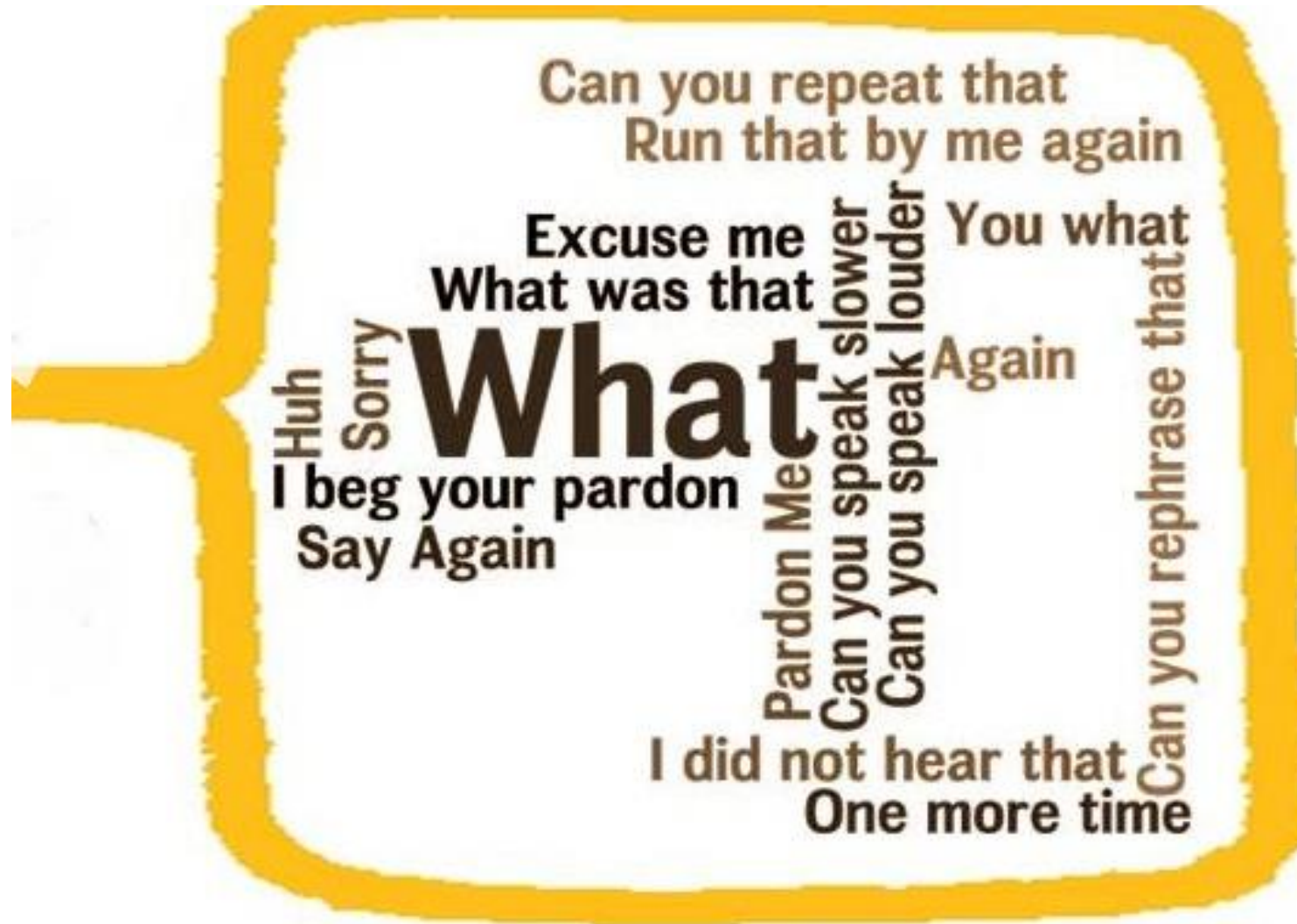


Role of the GP in hearing related issues

- Long term relationship of trust - refer to audiologist
- Widespread impact on overall health, well-being and independence.
- Promotes healthy ageing



**Healthy Hearing -
The maintenance of quality of life
by ensuring hearing is not a barrier
to social interactions and
communication.**



When to refer

- Patient concerns
- Unsure about hearing levels
- Tinnitus assessment
- Unilateral HL or tinnitus – ENT referral
- Sudden loss – **immediate ENT referral**



**Refer earlier rather than later,
no matter the level of difficulty.**

Age Related Hearing Loss (ARHL)

- 66% > 65 years
- 80% > 80 years
- “normal”???
- Social stigma
- 14% with ARHL have hearing aids
- Social withdrawal and isolation, depression
- Role of medical professionals



Feel free to contact us for a copy of the presentation or for any audiology enquiries:

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