

Tinnitus

"only my ears whistle and buzz continuously day and night. I can say I am living a wretched life." 1801 L. von Beethoven

Marize Viljoen

Division of Otorhinolaryngology

Faculty of Health Sciences

Tygerberg Campus, University of Stellenbosch

Definition

- Tinnitus is the perception of sound in the absence of external stimuli
- Tinnere – “ringing” (Latin)

Classification

- Objective: Is heard by examiner
- Subjective: Only perceived by the patient

Objective Tinnitus

- Vascular Abnormalities- AV malformations, persistent stapedial artery, dehiscent jugular bulb, ↑ CO, glomus tumours
- Patulous eustachian tube- tube remains open abnormally. Ocean roar changes with respiration
- Muscle spasms- palatal myoclonus + contraction of tensor palatini, levator veli palatini; salpingopharyngeus (60-200b/min)

Subjective Tinnitus

- Presbysacusis
- NIHL
- Meniere's disease
- Otosclerosis
- Head trauma
- Acoustic neuroma
- Drugs
- OME
- TM-joint problems
- Cerumen impaction
- Hyperlipidemia
- Meningitis
- Syphilis

Drugs

- Anti-inflammatory drugs (NSAIDS)
- Antibiotics (Aminoglycoside)
- Antidepressants (Amitriptyline)
- Aspirin + Quinine
- Loop diuretics
- Chemotherapeutic agents

History

- Pulsatile/ Nonpulsatile
- Unilateral/ bilateral
- Pitch, loudness, constant/ episodic sound
- Infection/ Trauma/ Noise exposure/ Drugs
- Aggravating/ relieving factors
- Associated hearing loss

Examination

- Head + neck examination
- Otomicroscopy- mass behind TM
- Pneumatic otoscopy- OME
- Auscultating neck, skull, mastoid process + orbit for bruits
- Audiogram, tympanometry, speech discrimination + acoustic reflex

Investigations

- Lab – FBC, FTA, TFT, U+E, Lipid profile
- CT-scan – Temporal lesions/ trauma
- MRI – Acoustic neuroma

Treatment

- Underlying disease → Rx appropriately
- Diet modification, medications, habituation, masking, acupuncture, hypnosis + surgery
- Avoid stimulants (caffeine), ↑ noise, avoid quiet times at night (TV/ radio)

