

GP ADVICE SHEET - **ASYMMETRICAL SENSORINEURAL HEARING LOSS**

Identify any possible cause:

- asymmetrical noise exposure (eg. rifle shooting, tractor driving)
- head injury or surgery
- local infections
- ototoxic drugs
- congenital deafness
- family history

Examine ears and cranial nerves, and confirm sensorineural vs. conductive hearing loss by tuning fork tests (512Hz best)

Assess severity by pure tone audiometry (PTA).

[Private referral (\$70-75, 1 hour appointment) strongly recommended as public capacity is limited and waiting time is several months]

Acoustic neuroma

Acoustic neuromas are benign tumours of the vestibular nerve (VIII) that can cause deafness by direct compression.

They tend to grow slowly at around 1-2mm per year, although some can regress, and some can grow rapidly. Diagnosis requires MRI, hence the frequent referral of patients with ASNHL.

For patients with asymmetrical hearing loss the chance of acoustic neuroma is 3-5%

Clinical diagnosis is difficult, but concern is higher if:

- asymmetrical SN hearing loss of 15dB in three or more frequencies, 20dB in two or more, 25dB in one or more
- unilateral tinnitus
- atypical vertigo or headaches
- abnormal cranial neurology
- sudden onset (<3/7) of symptoms (sensori-neural hearing loss / unilateral tinnitus)
- absence of other possible causes for hearing loss

Management

All patients with high suspicion of acoustic neuroma need referral to ENT outpatients.

If concern is low, eg. presence of other possible causes, or absence of atypical features, there is still a 3-5% chance of acoustic neuroma and recommended practice is to perform MRI. However, due to pressure on resources, this service is currently not available to low risk patients in NMDHB.

Alternatively, patients may be referred for MRI in the private sector.

For those unable to access MRI it is advisable to repeat the PTA after 6-9/12 (deterioration may increase the patient's priority in the public system), although this is a poor predictor of the presence of acoustic neuroma.

Consider ACC claim for older patients with history of significant noise exposure or those with previous trauma.

Information required in referral letter:

To help identify those patients with particularly severe conditions who warrant more urgent attention could you please ensure the following information is included in your letter:

- history of noise exposure (work/recreational), trauma, surgery, otologic infections, ototoxic drugs, congenital deafness, FH
- degree of deafness (enclose copy of PTA result including bone conduction)
- onset (sudden or gradual?), duration?
- stable or worsening?
- presence and character of tinnitus, vertigo or headache?
- cranial neuropathy or other neurological signs?