BENIGN PAROXYSMAL POSITIONAL VERTIGO (BPPV)

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BPPV is a sensation of abnormal motion evoked by particular provocative positions, triggering involuntary eye movements (nystagmus). These provocative positions typically cause free floating 'rocks' ("canaliths") within a portion of the inner ear to produce aberrant stimulation of the motion detecting receptors, thus producing the sensation of movement.

Classic BPPV is typically triggered by a sudden movement from a sitting to laying position with the head tilted 45° to the affected ear; once in this position, there is a lag of a few seconds before the 'dizzy spell' commences. In most cases the dizziness will dissipate within 20 or 30 seconds, however it is triggered once again upon returning to a seated position. The onset of BPPV is often sudden, with many patients waking up with the condition. Thereafter, the vertigo may extend for days, weeks, or occasionally months to years; in some cases the symptoms may periodically resolve and then recur. Factors which may predispose patients to BPPV may include: inactivity, acute alcoholism, major surgery, and central nervous system disease. Many patients also have concomitant ear diseases which should be ruled out.

Physical examination findings in patients with BPPV are typically unremarkable, with the exception of the Dix-Hallpike manoeuvre, which is the standard clinical test for BPPV. This test involves rapidly positioning the patient from a seated to supine position with the head turned 45° to the side; after a lag of 20-30 seconds, the patient is returned to the sitting position and the doctor observes for nystagmus. The procedure is then repeated with the head turned towards the opposite side.

Treatment options for BPPV include: watchful waiting, vestibulosuppressant medication, canalith repositioning, and surgery. Because BPPV can resolve on its own, simply observing the patient may be all that is required; however, since episodes of vertigo will still occur, this puts the patient in danger of suffering falls or other mishaps from dizzy spells. Vestibulosuppressant medications will mask the symptoms of vertigo, however it will not solve the problem and should not be considered a permanent solution; side effects of the medications such as grogginess or sleepiness should also be considered.

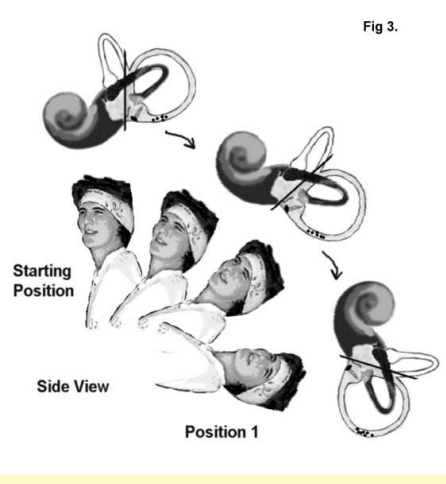

Figure 1: Epley's Manoeuvre

Canalith repositioning has a high benefit-to-risk ratio and is often the treatment method of choice. The most commonly used repositioning procedure is the Epley Manoeuvre. The Epley Manoeuvre involves gentle movements of the head to rearrange the displaced particles within the inner ear; it is a non-invasive in-office procedure that can cure BPPV within 1-2 sessions, and has a 95% success rate. Following the procedure patients are advised to avoid lying flat for 24-48 hours, and avoid any jarring activities with the head.

Surgery is reserved for patients in which canalith repositioning fails, and is not a first line treatment option due to the risks involved (hearing loss, facial nerve damage).

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