

# Dix-Hallpike & Epley Manoeuvres

## How to perform a Dix-Hallpike Test

The Dix-Hallpike Test is done as follows:

1. The patient begins sitting upright on a couch, with the legs extended and the head rotated 45 degrees towards the affected ear. The examiner holds the head.



2. The patient quickly lies down backwards. Their head should be 10 – 20 degrees below the horizontal when they are on their back. Their head should still be turned towards the affected side. The clinician observes the patient's eyes for nystagmus.



3. The patient remains in this position for approximately 30 – 50 seconds or until the nystagmus and vertigo have ceased.
4. Still with their head turned the patient then sits up and the examiner observes for nystagmus again.



5. To assess for fatigability of nystagmus and vertigo the patient should undergo a second test by repeating steps 1 – 3.

The characteristics of the nystagmus are important and the examiner looks for five distinct features during the Dix-Hallpike Test:

1. A latent period – after lying down there is a brief spell where there is no nystagmus or vertigo. This lasts up to 5 seconds.
2. Direction - Geotropic rotatory nystagmus with a small horizontal component towards the upper ear.
3. Duration - of the nystagmus is between 5 and 15 seconds usually but always less than a minute
4. Reversibility – on sitting up the examiner may see nystagmus in the opposite direction to that seen on lying down but this is not easy to detect
5. Fatigability – on repeated positioning the nystagmus and may disappear

## How to perform an Epley Manoeuvre

The Epley manoeuvre is done as follows:

1. The patient begins sitting upright on a couch, with the legs extended and the head rotated 45 degrees towards the affected ear. The examiner holds the head.



2. The patient quickly lies down backwards. Their head should be 10 – 20 degrees below the horizontal when they are on their back. Their head should still be turned towards the affected side. The clinician observes the patient's eyes for nystagmus.



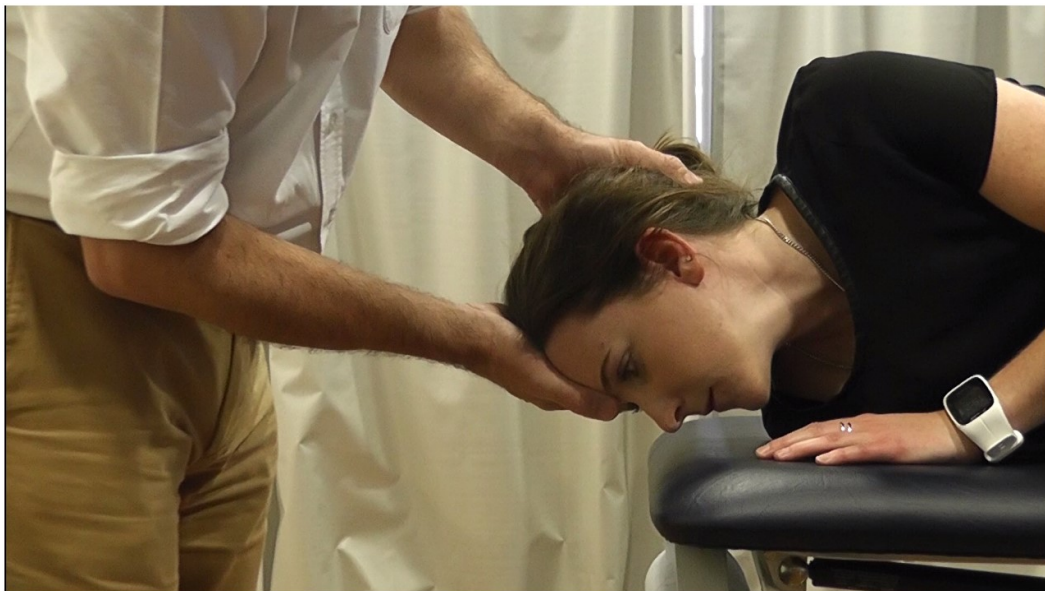
3. The patient remains in this position for approximately 30 – 50 seconds or until the nystagmus and vertigo have ceased.



4. The patient's head is then turned 90 degrees to the opposite side. The head should still be 10 – 20 degrees below horizontal.



5. The patient remains in this position for approximately 30 – 50 seconds.
6. The patient now rolls onto their side while keeping the head and neck in a fixed position relative to the body. By doing this the head will turn a further 90 degrees and the patient will now be looking downwards at a 45-degree angle.



7. Patients sometimes feel more vertigo when making this move. The patient remains in this position for approximately 30 – 50 seconds.
8. Finally, the patient is slowly brought up to an upright sitting posture and the head is immediately tipped forwards so that the chin lies on the chest.



During each step of this procedure the patient may experience some dizziness.