Assessment and Management of Dizziness and Visual Disturbances Following Concussion/Mild Traumatic Brain Injury: Guidance for the Primary Care Manager

This clinical recommendation is intended to assist primary care managers (PCMs) in the Military Health System and Department of Veterans Affairs in the care of service members and veterans with dizziness or visual disturbances following concussion or mild traumatic brain injury (mTBI).

Dizziness and visual disturbances are commonly associated with mTBI and often present with overlapping symptomatology. The incidence of dizziness is estimated to range from 24% to 83% and potentially up to 90% acutely following mTBI. Common causes of dizziness secondary to mTBI include peripheral and central vestibular dysfunction. Subjective visual disturbances, such as blurry vision, trouble focusing, and photophobia, have been reported in over 87% of service members within one year after TBI. Visual symptoms associated with mTBI are often the result of oculomotor dysfunction, including accommodative dysfunction and convergence insufficiency.

Dizziness and visual disturbances will often resolve within a few weeks following mTBI with Progressive Return to Activity (PRA) and PCM management. However, symptoms may persist and require referral to a higher level of care (e.g., TBI specialty clinic, specialty trained providers). Such referrals, as well as monitoring for the resultant progress of the patient, fall within the purview of the PCM.

This is an interactive document. Please click the links in each box for detailed instructions and additional resources.

Initial Assessment

- Rule out Red Flags
- Assess patient history including Contributing Factors
- Focused physical examination including Vestibular/Ocular-Motor Screening (VOMS) and standard neurological examination
- Ensure compliance with Progressive Return to Activity

Since your injury...?

- Do you feel like you are going to fall or lose your balance?
- Do you feel lightheaded, like you are unsteady or going to pass out?
- Do you feel like you or the room around you is spinning or moving?

Dizziness Assessment

- Are your symptoms worse when you turn your head (e.g., blurry vision, dizziness)?
- Does walking seem harder now or require more concentration?
- Do you get dizzy or have motion sensitivity in elevators, escalators, or moving vehicles?
- Do you feel uneasy or unwell (e.g., nausea, disorientation) in crowded or busy environments?
- Do you sway or bump into objects more than before?

BOTH Dizziness and Visual Disturbances Assessments

- Have you noticed a change in your ability to read or do computer work?
- Do you have blurry vision or difficulty seeing clearly?
- Do you experience dry eyes, sensitivity to light, or glare?
- Do you experience headaches or worsening symptoms during visual tasks (e.g., reading, cell phone use, video games, computer work, or driving)?

Disposition

Visual Disturbances Assessment
Barotrauma/Alternobaric Vertigo

ICD-10 Code for PCMs: Other peripheral vertigo [H81.39]

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>Evaluation</th>
<th>Treatment Recommendations</th>
<th>Specialty Referral Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertigo (typically spinning sensation) that occurs seconds or minutes following a drastic change in pressure (e.g., blast exposure, diving, altitude change)</td>
<td>Eustachian tube function testing</td>
<td>Non-Pharmacologic:</td>
<td>Ear Nose &amp; Throat (ENT): If symptoms are persistent, or associated with TM perforation or hearing loss, immediately refer to ENT to rule out inner ear injury or perilymphatic fistula</td>
</tr>
<tr>
<td>Typically resolves in minutes, but can last hours to weeks</td>
<td>TM perforation and hemotympanum may be visualized on otoscopic exam</td>
<td>Pressure normalization (pinch nostrils and forcibly attempt to exhale with closed mouth)</td>
<td>Audiology: Evaluation and monitoring of hearing loss</td>
</tr>
<tr>
<td>Can be associated with tympanic membrane (TM) perforation</td>
<td>Continuous (Constant)</td>
<td>Typically self-limiting condition</td>
<td>Occupational Therapy or Physical Therapy (with specialized training in vestibular rehabilitation): Evaluation and management of persistent or recurrent symptoms, including dizziness or functional complaints in balance, gait, or daily activities</td>
</tr>
<tr>
<td>More common after blast-induced TBI</td>
<td>Spontaneous</td>
<td>Provide patient with Managing Dizziness Following Concussion/mTBI Fact Sheet</td>
<td>Pharmacologic: none</td>
</tr>
</tbody>
</table>

BPPV

Assess for:
- Cervicogenic Dizziness
- Orthostatic Hypotension
- Other Vestibular Dysfunction (diagnosed by specialist)
### Benign Positional Paroxysmal Vertigo (BPPV)\(^6,28,29\)
**ICD-10 Code for PCMs: Other peripheral vertigo [H81.39] (used for suspected diagnosis)**
**ICD-10 Code for PCMs: BPPV [H81.1] (used for confirmed diagnosis)**

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>Evaluation</th>
<th>Treatment Recommendations</th>
<th>Specialty Referral Guidance</th>
</tr>
</thead>
</table>
| • Recurrent, brief (<1 minute) episodes of vertigo (spinning sensation) triggered by specific types of head movements and confirmed by observing predictable nystagmus pattern during a provoking maneuver (e.g., Dix-Hallpike) | • Dix-Hallpike Maneuver/Test\(^{30}\) Posterior canal (most common canal affected in the mTBI patient)\(^6,29,31\)  
If Dix-Hallpike does not produce nystagmus but patient is symptomatic, may attempt in clinic or at home canalith repositioning maneuvers based on clinical judgement  
Advanced imaging is not recommended in patients who meet diagnostic criteria for BPPV unless additional signs/symptoms are present (e.g., ataxia, cranial nerve abnormalities, weakness)\(^31\)  
• Assessment and Treatment of BPPV | • Non-Pharmacologic:  
Canalith repositioning maneuver by trained provider (e.g., Epley Maneuver)\(^28,31,33\)  
Provide patient with Managing Dizziness Following Concussion/mTBI Fact Sheet  
• Pharmacologic:  
Typically not recommended post-mTBI  
Note: Use of vestibular suppressants have the potential to worsen concussive symptoms and impede recovery\(^31,34\)  
For patients with severe nausea or vomiting with Dix-Hallpike, consider ondansetron 4-8mg PO 30 to 60 minutes prior to canalith repositioning maneuver\(^31\) | • Occupational Therapy or Physical Therapy (with specialized training in vestibular rehabilitation):  
Evaluation and management of:  
• Patients with persistent or recurrent symptoms  
• Patients who cannot tolerate repositioning maneuver |

### Cervicogenic Dizziness (CGD)\(^35-37\)
**ICD-10 Code for PCMs: Vertigo of Central Origin [H81.4] (used for suspected diagnosis)**
**ICD-10 Code for PCMs: Cervical Vertigo [I69.998] (used for confirmed diagnosis)**

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>Evaluation</th>
<th>Treatment Recommendations</th>
<th>Specialty Referral Guidance</th>
</tr>
</thead>
</table>
| • Episodes of dizziness lasting minutes to hours, typically triggered by changes in cervical spine position or movement  
• Close temporal relationship with onset of cervical spine symptoms and neck pathology  
• Characterized by the presence of imbalance, unsteadiness, disorientation, neck pain, and limited cervical range of motion (ROM), and may be accompanied by a headache | • Cervical-spine imaging if indicated  
If imaging is negative (or not indicated), full cervical spine examination with attention to symptom provocation with ROM  
• Cervical Neck Torsion Test | • Non-Pharmacologic:  
Heat, ice, or cervical spine exercises may help alleviate pain  
Provide patient with Managing Neck Pain Fact Sheet  
• Pharmacologic:  
Analgesics or anti-inflammatories for cervical pain and stiffness | • Physical Therapy:  
Evaluation and treatment of cervical and vestibular symptoms\(^27\) |
## Labyrinthine Concussion

**ICD-10 Code for PCMs: Other peripheral vertigo [H81.39]**

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>Evaluation</th>
<th>Treatment Recommendations</th>
<th>Specialty Referral Guidance</th>
</tr>
</thead>
</table>
| ● Traumatic peripheral vestibular or inner ear injury after mTBI, typically without skull or temporal bone fracture | ● TM perforation and hemotympanum may be visualized on otoscopic exam  
   + Weber Test (tuning fork sound lateralizes to the normal ear when placed on top of head)  
   ▪ If sensorineural hearing loss, consider MRI Brain with intra-auditory canals (IACs)  
   + Rinne Test (bone conduction > air conduction)  
   ▪ If + conductive hearing loss, consider CT to rule out skull or temporal bone fracture  
   ● Romberg Test  
   ● Examine for spontaneous nystagmus or gaze-evoked nystagmus | ● Non-Pharmacologic:  
   ▪ Can be self-limiting  
   ▪ Provide patient with Managing Dizziness, Following Concussion/mTBI Fact Sheet  
   ● Pharmacologic:  
   ▪ Consider ondansetron 4-8mg PO PRN for patients with severe nausea or vomiting | ● Audiology: Evaluation and monitoring of hearing loss and vestibular dysfunction  
   ● Ear, Nose, & Throat (ENT): Comprehensive middle and inner ear evaluation (e.g., hemotympanum, TM perforation, barotrauma)  
   ● Occupational Therapy or Physical Therapy (with specialized training in vestibular rehabilitation): Evaluation and management of:  
   ▪ Patients with persistent or recurrent symptoms  
   ▪ Patients who cannot tolerate repositioning maneuver |
Visual Disturbances Assessment

- For acute symptoms post-injury:
  - Ensure compliance with the Progressive Return to Activity.
  - Visual disturbances often resolve in the acute phase of recovery.
- For persistent or recurrent symptoms despite compliance with the Progressive Return to Activity:
  - Repeat visual disturbance screening questions.
  - Refer the patient to an eye care provider for a comprehensive vision and sensorimotor examination.

Review the below Primary Care Reference during progressive return to activity or while awaiting appointment with eye care provider.

<table>
<thead>
<tr>
<th>Common Subjective Visual Disturbances</th>
<th>Common Diagnoses (Typically Made by Eye Care Providers)</th>
<th>Evaluation</th>
<th>Treatment Recommendations</th>
<th>Specialty Referral Guidance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity to light</td>
<td>Accommodative dysfunction</td>
<td>Standard ocular exam to include visual acuity, extraocular eye movements, visual fields, cranial nerve testing</td>
<td>Non-Pharmacologic:</td>
<td>Optometry (with training in TBI if available):</td>
</tr>
<tr>
<td>Eye pain</td>
<td>Binocular vision disorders (convergence insufficiency is most common)</td>
<td>VOMS</td>
<td>• Take breaks. Patients should follow the 20/20/20 rule: Every 20 minutes, look at something at least 20 feet away for 20 seconds especially when reading, watching television, or using an electronic device</td>
<td>• Comprehensive vision and sensorimotor assessment</td>
</tr>
<tr>
<td>Headaches</td>
<td>Saccadic and pursuit impairment</td>
<td></td>
<td>• Reduce glare. Instruct patients to use natural light whenever possible. Patients may benefit from temporary use of tinted lenses, computer screen covers, or blue light filters</td>
<td>• Evaluation for vision therapy and specialty lenses</td>
</tr>
<tr>
<td>Motion sensitivity</td>
<td>Dry eye</td>
<td></td>
<td>• Provide patient with Managing Vision Changes Following Concussion/mTBI Fact Sheet</td>
<td>• Occupational Therapy or Physical Therapy (with training in TBI vision rehabilitation):</td>
</tr>
<tr>
<td>Bluzy vision or trouble focusing</td>
<td>Photophobia</td>
<td></td>
<td>• Pharmacologic: Consider a lubricating eye drop for dry eye symptoms</td>
<td>• Treatment of visual disturbances</td>
</tr>
<tr>
<td>Trouble following a moving target</td>
<td>Other visual disturbances</td>
<td></td>
<td></td>
<td>• Recommendations for functional strategies for living with visual disturbances</td>
</tr>
<tr>
<td>Double vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comprehension difficulties</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balance and gait problems</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

ICD-10 Code for PCMs: Other Subjective Visual Disturbance [H53.19]
**Red Flags**

Any dizziness symptoms or visual changes indicating a life or vision-threatening condition warrant immediate referral to the Emergency Department (ED), regardless of etiology. For acute evaluation of mTBI, red flags are listed in the MACE 2. If any of the indications below are detected during the neurological exam, physical exam, or VOMS, immediately refer to a higher level of care.

<table>
<thead>
<tr>
<th>Indications for Immediate Referral</th>
<th>Referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal external eye exam (e.g., evidence of infection or hemorrhage)</td>
<td>Eye Care Provider</td>
</tr>
<tr>
<td>Abnormal visual behavior (e.g., unexpectedly bumping into things)</td>
<td>TBI Trained Eye Care Provider</td>
</tr>
<tr>
<td>Acute visual symptoms (e.g., evidence of trauma, severe eye pain, flashes, floaters, severe photophobia)</td>
<td>Eye Care Provider</td>
</tr>
<tr>
<td>Acute onset of hearing loss</td>
<td>ED, ENT, or Audiology</td>
</tr>
<tr>
<td>Acute onset of unequal pupils</td>
<td>ED</td>
</tr>
<tr>
<td>Acute onset vision loss/visual field deficit</td>
<td>ED, Neurology, or TBI Trained Eye Care Provider</td>
</tr>
<tr>
<td>Double vision</td>
<td>Neurology or TBI Trained Eye Care Provider</td>
</tr>
<tr>
<td>Persistent drainage or bleeding from ear or nose</td>
<td>ENT or Audiology</td>
</tr>
<tr>
<td>TM perforation</td>
<td>ENT</td>
</tr>
</tbody>
</table>

**Contributing Factors**

Comorbid conditions and medications may contribute to dizziness and visual disturbances, and can be exacerbated by mTBI.

<table>
<thead>
<tr>
<th>Comorbidities</th>
<th>Examples</th>
<th>Effects</th>
<th>Additional Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Health(^{41-45})</td>
<td>• Acute Stress Reaction or Disorder (ASR, ASD)</td>
<td>• Blurry vision</td>
<td>• Depression Resources</td>
</tr>
<tr>
<td></td>
<td>• Anxiety</td>
<td>• Dizziness</td>
<td>• Primary Care Behavioral Health Clinical Pathways</td>
</tr>
<tr>
<td></td>
<td>• Panic disorder</td>
<td>• Lightheadedness</td>
<td>• VA/DOD PTSD and ASR Clinical Practice Guideline (CPG)</td>
</tr>
<tr>
<td></td>
<td>• Post-Traumatic Stress Disorder (PTSD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>• Arrhythmias</td>
<td>• Blurry Vision</td>
<td>• American Heart Association Statements and Guidelines</td>
</tr>
<tr>
<td></td>
<td>• Dysautonomia</td>
<td>• Dizziness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Orthostatic hypotension</td>
<td>• Lightheadedness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Vertebrobasilar insufficiency</td>
<td>• Syncope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Common migraine and migraine variants such as ocular migraine and vestibular migraine</td>
<td>• Weakness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Headache/Migraine(^{41,48,49})</td>
<td></td>
<td>• Headache Following mTBI Clinical Recommendation</td>
</tr>
<tr>
<td></td>
<td>• Obstructive Sleep Apnea</td>
<td>• Vestibular or visual symptoms may precede or co-occur with migraine headache</td>
<td>• VA/DOD Headache CPG</td>
</tr>
<tr>
<td></td>
<td>• Insomnia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep Disturbances</td>
<td>• Disordered sleep can exacerbate visual and vestibular symptoms as well as cognitive deficits and headache</td>
<td></td>
<td>• Sleep Disturbances Following mTBI Clinical Recommendation</td>
</tr>
<tr>
<td></td>
<td>• Headache/Migraine(^{41,48,49})</td>
<td></td>
<td>• VA/DOD Sleep CPG</td>
</tr>
</tbody>
</table>
**Medications**

The following list is not all-encompassing, and focuses on medications commonly prescribed for the treatment of mTBI sequelae and comorbidities. The patient should be asked if there have been any recent changes to their medications—including over-the-counter medications and supplements—to assess the temporal relationship between medication initiation or discontinuation and the onset of symptoms.

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
<th>Dizziness and Vision Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analgesics</td>
<td>Opioids, tramadol</td>
<td>Dizziness, orthostatic hypotension</td>
</tr>
<tr>
<td>Antidepressants</td>
<td>SSRIs, SNRIs, TCAs, bupropion, mirtazapine, trazodone</td>
<td>Dizziness, orthostatic hypotension, sedation or stimulation TCAs: accommodation difficulties, blurry vision</td>
</tr>
<tr>
<td>Anticholinergics, Antihistamines</td>
<td>Dimenhydrinate, diphenhydramine, meclizine, promethazine, scopolamine</td>
<td>Dizziness, orthostatic hypotension, Accommodation difficulties, blurry vision, dry eye</td>
</tr>
<tr>
<td>Antipsychotics</td>
<td>Olanzapine, quetiapine</td>
<td>Dizziness, orthostatic hypotension</td>
</tr>
<tr>
<td>Anxiolytics</td>
<td>Benzodiazepines (e.g., lorazepam), buspiron</td>
<td>Dizziness, drowsiness, Benzodiazepines: hypotension, orthostatic hypotension</td>
</tr>
<tr>
<td>CNS Stimulants</td>
<td>Dextroamphetamine/amphetamine, methylphenidate, caffeine</td>
<td>Dizziness, stimulation, Accommodative difficulties, blurry vision, mydriasis</td>
</tr>
<tr>
<td>Migraine Medications</td>
<td>Anticonvulsants (e.g., topiramate, gabapentin) Beta-blockers (e.g., propranolol) Serotonin receptor agonists (e.g., sumatriptan)</td>
<td>Dizziness, drowsiness, Topiramate: acute myopia and secondary angle closure glaucoma can occur days to one month after initiation Beta-blockers: hypotension, orthostatic hypotension</td>
</tr>
<tr>
<td>Muscle Relaxants</td>
<td>Baclofen, cyclobenzaprine, methocarbamol</td>
<td>Dizziness, drowsiness, Blurry vision, increased intraocular pressure</td>
</tr>
<tr>
<td>Sleep or Sleep-related Medications</td>
<td>Sedative-hypnotics (e.g., zolpidem, eszopiclone), prazosin, melatonin</td>
<td>Dizziness, drowsiness, Sedative-hypnotics: vision changes Prazosin: ocular migraine, orthostatic hypotension</td>
</tr>
</tbody>
</table>

**Disposition**

Dizziness and visual disturbances will often resolve within a few weeks after mTBI with PCM management and **Progressive Return to Activity**. If symptoms persist or are severely limiting, first refer to a TBI Specialty Clinic, if available. Providers may also use the specialty referral guidance pertaining to specific symptoms and conditions following mTBI provided above. Document disposition in the electronic health record and on the **Patient and Leadership Guide** with consideration of the functional impact of dizziness and visual disturbances on the service member's ability to perform the mission and the risk of harm to self or others. Certain conditions and medications can affect deployability and restrict duty status. Policies and procedures are service and command specific. Consult duty and deployment standards for your organization when dispositioning patient.

**Coding Guidance**: For additional guidance refer to [ICD-10-CM Coding Guidance for Traumatic Brain Injury](#) or the [Hearing Center of Excellence Coding Guidance for Diagnosing Vestibular Disorders in the MHS](#).
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASD</td>
<td>Acute Stress Disorder</td>
</tr>
<tr>
<td>ASR</td>
<td>Acute Stress Reaction</td>
</tr>
<tr>
<td>BPPV</td>
<td>Benign Positional Paroxysmal Vertigo</td>
</tr>
<tr>
<td>CNS</td>
<td>Central Nervous System</td>
</tr>
<tr>
<td>CPG</td>
<td>Clinical Practice Guideline</td>
</tr>
<tr>
<td>CT</td>
<td>Computed Tomography</td>
</tr>
<tr>
<td>DOD</td>
<td>Department of Defense</td>
</tr>
<tr>
<td>ED</td>
<td>Emergency Department</td>
</tr>
<tr>
<td>EHR</td>
<td>Electronic Health Record</td>
</tr>
<tr>
<td>ENT</td>
<td>Ear, Nose, and Throat</td>
</tr>
<tr>
<td>IAC</td>
<td>Internal Auditory Canal</td>
</tr>
<tr>
<td>MACE 2</td>
<td>Military Acute Concussion Evaluation 2</td>
</tr>
<tr>
<td>MRI</td>
<td>Magnetic Resonance Imaging</td>
</tr>
<tr>
<td>mTBI</td>
<td>Mild Traumatic Brain Injury</td>
</tr>
<tr>
<td>OSA</td>
<td>Obstructive Sleep Apnea</td>
</tr>
<tr>
<td>PCM</td>
<td>Primary Care Manager</td>
</tr>
<tr>
<td>PO</td>
<td>By Mouth</td>
</tr>
<tr>
<td>PRA</td>
<td>Progressive Return to Activity</td>
</tr>
<tr>
<td>PRN</td>
<td>As Needed</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post-Traumatic Stress Disorder</td>
</tr>
<tr>
<td>ROM</td>
<td>Range of Motion</td>
</tr>
<tr>
<td>SNRIs</td>
<td>Serotonin and Norepinephrine Reuptake Inhibitors</td>
</tr>
<tr>
<td>SSRIs</td>
<td>Selective Serotonin Reuptake Inhibitors</td>
</tr>
<tr>
<td>TBI</td>
<td>Traumatic Brain Injury</td>
</tr>
<tr>
<td>TCAs</td>
<td>Tricyclic Antidepressants</td>
</tr>
<tr>
<td>TM</td>
<td>Tympanic Membrane</td>
</tr>
<tr>
<td>VA</td>
<td>Veteran's Affairs</td>
</tr>
<tr>
<td>VOMS</td>
<td>Vestibular/Ocular-Motor Screening</td>
</tr>
</tbody>
</table>
Appendix A: Dix-Hallpike Maneuver/Test*

The following instructions are for suspected BPPV affecting the right ear. Perform maneuver in the opposite direction if BPPV in the left ear is suspected. Before starting, inform the patient that the maneuver may cause brief vertigo and nausea that should improve with treatment. Visit HCE’s YouTube page for a video demonstration of the Dix-Hallpike Maneuver/Test.

**Right**

A) Stand beside the patient and turn their head 45° to the right. Instruct the patient to keep their eyes open and focused on you.

B) Lay the patient down with their head slightly hanging over the exam table and their neck extended 30°.

C) Keep the patient in this position for 30–60 seconds while you observe their eyes for nystagmus. The latency, duration, and direction of nystagmus should be noted. After the nystagmus resolves or after 60 seconds, guide the patient back to the seated position. Once seated, observe for any nystagmus for another 30 seconds.

D) If upbeating, ipsitorsional nystagmus is elicited, perform a canalith repositioning on the right side (e.g., Epley Maneuver). If it is not, repeat the Dix-Hallpike maneuver on the opposite side.

The typical positive response in patients with posterior canal BPPV (most common type) will be nystagmus that appears with a latency of a few seconds and duration of less than 30 seconds. The nystagmus will be mixed rotary (with the upper pole of the eyes beating towards the affected ear) and vertical. Once the patient is back in the seated position, the nystagmus may recur, but in the opposite direction.

*Side-lying test* is a valid alternative to the Dix-Hallpike maneuver for individuals with cervical range-of-motion limitations or other problems that preclude use of Dix-Hallpike maneuver. Visit HCE’s YouTube page for a video demonstration of the side-lying test.
Appendix B: Epley Maneuver

Repeat this maneuver daily until symptoms have resolved. Visit HCE’s YouTube page for a video demonstration of the Epley Maneuver (right side).

**Right**

1) Sit on the bed and turn your head 45° to the right.

Lie back quickly.

Wait for 30 seconds.

2) Turn your head 90° to the left without raising it.

Wait for 30 seconds.

3) Turn your body and head 90° to the left.

4) Sit up on the left side of the bed.
Appendix B: Epley Maneuver

Repeat this maneuver daily until symptoms have resolved. Visit [HCE’s YouTube page](#) for a video demonstration of the Epley Maneuver (left side).

**Left**

1) Sit on the bed and turn your head 45° to the left.

   Lie back so that your head is slightly extended.

   Wait here for 30-60 seconds.

2) Turn your head so that it is now facing 45° to the right.

   Wait here for 60 seconds.

3) Roll onto your side and keep your head turned towards the right, such that your eyes are now facing down towards the floor.

   Wait here for 60 seconds.

4) While keeping your head turned to the right, sit up. Once you are sitting up, you can turn your head to a comfortable position.
References


References (Continued)


References (Continued)


Acknowledgements

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