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Patient Education Kit for Migraine

AHS Complementary and Integrative Medicine Special Interest Section

Vestibular Migraine

Vestibular migraine occurs commonly in individuals with migraine and can be associated with increased migraine-related disability.^{1,2} Because limited data on management of vestibular symptoms exists, treatment recommendations for vestibular migraine are often extrapolated from studies on migraine in general.³ An integrated approach to vestibular migraine treatment can lead to long-term symptomatic improvement.⁴ The following evidence-based suggestions may be considered:

Vestibular Therapy

Vestibular rehabilitation (VR) is a specialized form of physical therapy that focuses on the vestibular system to treat dizziness and imbalance.^{5,6} Exercises often include graded body, head, and eye movements to restore function of the vestibular system.⁷ VR is performed by trained professionals. Targeted exercises with a therapist may include balance training, gaze stabilization exercises, and postural training to help with both acute episodes and with lingering symptoms between attacks. The duration of treatment with VR may vary between individuals.^{7,8} The exercises may make an individual feel increased dizziness while performing them, but this sensation often resolves with practice over time.

Sample VR Exercises. Note: Please check with your vestibular therapist and/or medical provider before attempting these exercises at home.

Balance focused exercises:

- Sit or stand with eyes closed on even surface and uneven surface
- Walk and turn your head
- Walk and turn your body

Head and eye movement focused exercises:

- Follow a moving target with your eyes
- Jump your eyes from one target to another
- Move your head side to side, up and down, and tilt side to side
- Move your head while stabilizing your vision on a target
- Move your head and a target together while looking at the target

Exercises to reduce sensitivity to visual "flow" (typically done for 10-30 seconds at a time):

- Watch videos of repetitive patterns
- Watch first person videos of walking, driving, or other activities
- Virtual reality

To locate a vestibular therapist, please speak with your medical provider.

Exercise

Exercise is important for the treatment of vestibular migraine.⁹ Both aerobic exercise and resistance or strength-building exercises are recommended.^{10,11} Please discuss the below exercises with your care provider prior to initiation.

Cardiovascular/Aerobic Exercise

Training for at least 20 minutes per day, three days per week, for a total of six weeks significantly reduces vestibular migraine.⁹

Strength-building Exercise

There are some clinical trials addressing strength-building exercises in migraine, as well as one randomized controlled trial on vestibular migraine.¹¹⁻¹³ The literature recommends aiming for 2-3 sets of 12-15 repetitions at a capacity of 45-60% of the maximal weight lifted in a single session, to be performed three times per week as treatment for migraine.¹²

Supplements

Several vitamin and mineral supplements, or nutraceuticals, may contribute to the treatment of migraine and vestibular migraine.^{14,15} Nutraceuticals are not regulated by the United States Food and Drug administration, therefore actual supplement content may vary. If you are pregnant or have other medical conditions, please discuss these options with your health care provider prior to initiating treatment.

Several studies have evaluated vestibular migraine response to nutraceuticals. Magnesium, vitamin B2, co-enzyme Q10, and feverfew supplementation have efficacy in migraine and in vestibular migraine.^{16,17} These therapies can be used in combination with a multimodal treatment approach.¹⁸ Dosing for evidence-based supplements^{19,20} includes:

- Magnesium 600mg per day. Some individuals prefer to start at a lower dose to ensure tolerability. Formulations may include magnesium glycinate, citrate, or others.
- Vitamin B2 400mg per day
- Feverfew 50-300mg twice daily
- CoQ10 300mg daily (can be split into 150mg twice a day)

For more information, please refer to the Patient Education Kit *Supplements section*:

<https://americanheadachesociety.org/wp-content/uploads/2022/12/Patient-Education-Kit-for-Migraine-Final-Supplements-11-27-22-Revision.pdf>

Sleep

Optimizing sleep has been shown to improve vestibular migraine. Development of a restful sleep pattern has been shown to improve both dizziness and headache-related disability.^{3,10} Good sleep hygiene includes:²¹

- Consistent sleep and wake times
- Adequate duration of sleep (between 7-9 hours per night)
- Avoidance of screens and bright lights for at least 1 hour prior to sleep
- Guided meditation/relaxation
- Limiting caffeine, alcohol, and nicotine

In addition, sleep disorders are common in migraine. If individuals have difficulty falling asleep or staying asleep, or if they snore, it may be worthwhile to undergo specialist evaluation.²²

Nutrition

Some individuals may experience benefit from dietary interventions as treatment for migraine.^{3,23} Evidence-based suggestions are anchored in regular eating schedules and adequate hydration is also important.^{23,24} A healthy body weight is recommended, as being over- or underweight can be associated with increased risk of migraine.²⁵

Trigger Factors

There may be an overlap in triggers between migraine and vestibular migraine.²⁶ Individuals may benefit from completing a headache diary to help identify trigger factors.

Trigger modification can be an effective tool in managing vestibular migraine.^{10,27} Vestibular migraine trigger factors can be divided into those that are avoidable (e.g., sleep irregularities, skipping meals, specific foods, complex visual stimuli) and those that are unavoidable (e.g., weather changes, intercurrent illness).^{10,27} Treatment strategies may include development of healthy sleeping habits, consuming meals at regular times, learning strategies to manage stress, and limiting stimuli that may contribute to visual-vestibular mismatch (e.g., screen time, 3-D movies, flicker).²⁷

Cognitive behavioral therapy

Cognitive behavioral therapy (CBT) is a behavioral treatment approach in which an individual learns strategies to change thoughts, feelings, and behaviors via relaxation techniques, graded exposure to avoided situations/conditions, and education.²⁸ CBT is considered a *probably effective* treatment for vestibular migraine.²⁹ CBT has been shown to decrease both dizziness and disability in individuals with chronic subjective dizziness.²⁸

If you are interested in finding a medical provider trained in CBT for vestibular migraine, please contact your primary care provider for local resources.

References

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