Medications and Dizziness

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Fact Sheet

Produced by

VESTIBULAR REHABILITATION SPECIAL INTEREST GROUP
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A Special Interest Group of

ACADEMY OF NEUROLOGIC PHYSICAL THERAPY

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Vestibular Suppressants

For the first few days of a vestibular crisis, Meclizine and other vestibular suppressants can be helpful to control severe vertigo, dizziness, and nausea. However, chronic use is counterproductive to the central nervous system's (CNS) compensation process. Vestibular suppressants decrease the CNS's ability to compensate for vestibular loss and can prolong recovery time.[1-4] Vestibular suppressants have the added risk of producing drowsiness, cognitive deficits, difficulty driving, and increasing the possibility of falls.[5] The recommendation to decrease and eliminate vestibular suppressants has been well documented in the literature.[1,3-9]

Vestibular Neuritis

It is thought that while vestibular neuritis is caused by a virus, the symptoms are due to the inflammation process causing compression of the vestibular nerve.[10-12] Studies have shown the effectiveness of corticosteroids to treat the impairments of vestibular neuritis [11,12] and the benefits of corticosteroids over antiviral or placebo medications.[11]

Benign Paroxysmal Positional Vertigo (BPPV)

The practice guideline from the American Academy of Otolaryngology - Head and Neck Surgery recommends that clinicians do not treat BPPV with medication and instead advocates the use of canalith repositioning maneuvers (CRM's). Vestibular suppressants are only recommended for the short-term management of severe nausea or vomiting. Clinicians should instead offer education regarding medications, and their ability to cause potential harm versus benefit.[5] The practice guideline from the American Academy of Neurology states that research regarding the use of medication to treat BPPV is "inadequate or conflicting" and also recommends the use of CRM's.[13]

Migraine

Medications shown to be effective in treating migraine associated dizziness are antidepressants, beta blockers, calcium channel blockers, and anticonvulsant medications.[14, 15] Patients who received medicine as treatment for migraine associated dizziness have shown significantly better outcomes than patients who were not medicated.[16]

Meniere's Disease

Diuretics can significantly decrease the frequency and severity of Meniere's attacks.[14,17,18] The combination of medication and reduced dietary sodium is thought to decrease endolymphatic volume. During an acute attack of Meniere's disease, medication for symptom control is recommended.

Betahistine

Betahistine has been shown to impact neuronal excitability as well as excitability of the medial and lateral vestibular nuclei. Some studies have shown that it may play a role in vestibular compensation, behavioral recovery and reduction of symptoms. It may also have vascular effects on the cochlea and the brain.[19]

Anxiety

Anxiety associated with dizziness may or may not be correlated with vestibular dysfunction. Anti-anxiety medications (Benzodiazepines) and anti-depressants (SSRIs) have been recommended for patients with anxiety, dizziness, and balance impairments.[15]

Persistent Postural Perceptual Dizziness (PPPD)

PPPD is characterized by persistent non vertiginous sensations such as rocking/swaying and unsteadiness that lasts 3 months or more. While PPPD is often best treated with a multidisciplinary approach, certain medications have shown benefit. Selective serotonin reuptake inhibitors (SSRI's) and serotonin-norepinephrine reuptake inhibitors (SNRI's) may be a useful adjunct to vestibular therapy.[19]

In summary, medications can be useful in the management of certain vestibular disorders. However, they are not always indicated or necessary for optimal recovery. Careful consideration should be given to the patient's diagnosis, primary symptoms and recovery timeline.

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