ELIZA TWEDDLE F.R.A.C.S
EAR, NOSE AND THROAT, HEAD AND NECK SURGEONS

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Vestibular Migraine Information:

Migraine, a disorder usually associated with headache, can cause several vestibular syndromes. Migraine is extremely common. Studies suggest that more than 20 million people in the United States suffer from migraine and that about 25 percent of these experience dizziness during attacks.

Migraine Headache Classification:
The International Headache Society classifies migraine disorders into several types.

Migraine without aura consists of periodic headaches that are usually throbbing and one-sided, made worse by activity, and associated with nausea and increased sensitivity to light and noise. Vertigo can occur before, during, or separately from the episodes of migrainous headache.

Migraine with aura, or classic migraine, is associated with short-lived symptoms (noises, flashes of light, tingling, numbness, vertigo, and others) known as the aura. These symptoms usually precede the headache and usually last 5 to 20 minutes.

Migraine with prolonged aura, these symptoms may last a week.

Basilar migraine include vertigo, tinnitus, decreased hearing, and ataxia (loss of coordination).

Migraine patients may experience migraine with aura on some occasions and migraine without aura on other occasions.

Dizziness is a general sense of unsteadiness.

Vertigo is a special type of dizziness or unsteadiness. There is a hallucination of motion and that motion is characterized by a sensation of rotation or spinning. Sitting up or moving around tends to make the symptoms worse. Occasionally vertigo is severe enough to cause nausea and vomiting. When it comes to making a diagnosis the duration of the symptom whether it is minutes, hours or days is important.

Vertigo can broadly be grouped into two categories,namely

Peripheral Causes relating to disorders of the balance canals in the inner ear, with / without hearing loss
Central Causes which relate to disorders of the brain itself.

One's sense of balance depends on the brain processing information from a variety of sources including your eyes, ears, your joint position senses and other parts of your central nervous system. If the messages the brain receives from the sensory organs are contradictory or if the central processing part of the brain is not functioning properly one experiences a sense of dizziness or loss

of balance. In addition to the syndromes caused by migraine, several vestibular disorders have been associated with migraine. Studies indicate that people with migraine are much more likely than other people to experience severe motion sickness and may be more likely to suffer from **Meniere's disease** or **Benign Positional Paroxysmal Vertigo**.

Migraine triggers: Stress, anxiety, hypoglycaemia (low blood sugar), fluctuating estrogen (Hormones), certain foods, smoking, and other factors can trigger migraines.

Who gets migraine?

Vestibular Migraine typically occurs in people who have a personal family history of classic migraine. You may also suffer motion sickness when driving, while in a boat, even watching movement on TV

Symptoms: For most people with vestibular migraine the vertigo does not occur at the same time as a headache. The headaches need not be severe or unilateral. Attacks can last from a few minutes to days.

(1)episodic vestibular symptoms (rotational vertigo, other illusory self or object motion, positional vertigo, head motion intolerance) of at least moderate severity;
(2)migraine according to IHS criteria
(3)at least one of the following migrainous symptoms during at least two vertiginous attacks: migrainous headache, photophobia, phonophobia, visual or other auras
(4)other causes ruled out by appropriate investigations.

Probable migrainous vertigo is diagnosed for patients who do not meet definite criteria but were still believed to have migrainous vertigo as the most likely diagnosis.

Treatment:

Management of the vestibular symptoms of migraine is complicated by the facts that vestibular migraine is under diagnosed, the general migraine literature focuses on management of headaches rather than neurotologic symptoms, and almost no studies have addressed the efficacy of various treatments for the vestibular symptoms of migraine.

Vertigo and imbalance secondary to migraine usually respond to the same treatment used for migraine headaches. Treatment of migraine includes eliminating from the diet substances known to trigger migraine attacks, such as chocolate, nuts, cheese, red wine, and other foods. Medications may also be prescribed.

Management of headaches. Headache management involves modification of one's lifestyle, treatment of acute attacks, and prevention with prophylactic medications.

- **Lifestyle changes** are aimed at avoiding triggers of migraine. Regular sleep, regular meals, exercise, avoiding peaks of stress and troughs of relaxation, and avoiding dietary triggers can be helpful. Some patients find relaxation training and biofeedback useful. In particular, increasing the level of physical activity is often important, as ongoing problems with dizziness may lead patients to adopt a sedentary lifestyle and even avoid routine daily activities, which can in turn worsen their balance problems. Regular aerobic exercise seems to help many migraineurs. Tai Chi exercises improve scores on posturography

- **Preventive therapies** aim to reduce attack frequency, severity, and duration and are instituted based on a variety of factors, including the headache frequency, degree of disability caused by headaches, responsivity to acute treatments, and patient preference. Good evidence supports the use of amitriptyline, divalproex sodium (valproate), propranolol, timolol, fluoxetine, or gabapentin for daily migraine prophylactic therapy. Topiramate is a newer medication that also may be useful. On average, about two-thirds of the patients given any of these drugs will have a 50% reduction in headache frequency. It is helpful to keep a headache diary prior to and after starting treatment.
- **Acute Attacks**

  Simple nonspecific pain medications such as aspirin, acetaminophen, nonsteroidal antiinflammatory drugs, or combination analgesics, although the ready availability of these over-the-counter medications can lead to medication-overuse headaches or analgesic-rebound headaches.
- **Abortive therapy**: The introduction of triptans in 1992 has revolutionized abortive therapy of migraine headaches these include sumatriptan, naratriptan, rizatriptan, zolmitriptan, almotriptan, frovatriptan, and eletriptan, with more in development. Their use is somewhat limited by their high cost and contraindications in the presence of cardiovascular disease.

Management of vestibular symptoms.

- **Acute attacks**. Various antiemetic and antivertiginous drugs are useful for suppressing acute symptoms. Promethazine (Phenergan 25 or 50 mg orally or via suppository) works well for more severe attacks because of its combined antiemetic and antivertiginous properties, and the sedating effect is often welcomed in sick patients. Maxolon is also helpful for stimulating the stomach and increasing drug absorption. It is worth noting that these drugs require about 30 minutes to enter the blood and do not reach peak levels for 1 to 2 hours. Thus, medical management of very brief attacks may not be warranted.
- **Prophylactic medications** are appropriate when episodes of migrainous vertigo are frequent, severe, or not controlled by acute therapies. The same medications used to prevent migraine headaches are used for vestibular migraine. Therapy should be individualized, as each drug has its side effects and contraindications. β-blockers such as propranolol and metoprolol are useful for preventing vestibular symptoms. Tricyclic amines such as amitriptyline and nortriptyline are effective, generally well-tolerated, and advocated as first-line medical therapy by some. Like β-Blockers, calcium-channel blockers such as verapamil and nimodipine may be effective by preventing vasospasm to inner ear
- **These treatments** should be discussed with your general practitioner or neurologist so they can co-ordinate ongoing care.