

Migraine associated dizziness

What is migraine associated dizziness?

Migraine is a type of headache characterised by throbbing pain, which may be limited to one side of the head and is sometimes accompanied by nausea, vomiting and sensitivity to light and sound.^[1] Migraine headaches are a common, (sometimes undiagnosed) cause of repeated episodes of dizziness. Dizziness in migraine may occur with a headache, prior to or after the headache or completely independent of it.^[1] The dizziness may present as vertigo (sensation of spinning), imbalance or sensitivity to motion.

How common is migraine associated dizziness?

Studies show that in practices treating patients with headaches, approximately 27-33% of patients report of vertigo (feeling of spinning sensation).^[2, 3] Migraine is more common in women than men, especially in women of childbearing age.^[1]

What causes dizziness in migraine associated dizziness?

There are many theories but the exact cause is still unknown. About 80% of people who have migraine headaches have a family history of migraines, suggesting a genetic cause.^[4] People, who are prone to migraines, when exposed to certain triggers, may undergo changes in the brain associated with the release of certain chemicals.^[1] These changes may result in dizziness.

Another theory is that migraines result in a rapid decrease in blood flow to the brain that changes nerve activity in the region.^[5] If this affects the balance system, it can cause dizziness, motion sickness or unsteadiness.

How is diagnosis made?

There is no single test available to diagnose migraine associated dizziness. Diagnosis is based on medical history and by performing appropriate tests to rule out other causes of dizziness. As migraine associated dizziness has symptoms similar to those found in another cause of dizziness (Meniere's disease) it may not be possible to make a diagnosis immediately, and we may need to see how your symptoms progress over time.

What are the management options?

There are a number of different treatment options available for migraine associated dizziness that range from changes in lifestyle to medication and balance exercises

(vestibular rehabilitation). Your clinician will discuss which treatment options may be most effective and appropriate for you in order to manage your symptoms.

i) **Lifestyle modifications**^[5]

Keeping a diet log and avoiding any food triggers (see table below) have proven to be effective for many people. If you find a food that you feel may act as a trigger to your migraines, visit your doctor and he/she will be able to give you dietary advice on how to exclude it from your diet safely.

Some common triggers of migraine have been listed below:

1) **Food triggers**^[6]

Aged or ripened cheese (e.g. Cheddar, gruyere, stilton, parmesan).

Foods containing large amounts of monosodium glutamate (used as flavour enhancer in many foods).

Smoked, cured or processed meats.

Foods prepared with meat tenderiser, soy sauce, vinegar (except white vinegar) or yeast extract, pickles, alcohol, artificial sweeteners.

Chocolate, cocoa, nuts, peanut butter.

Excessive tea, coffee, cola.

Exercise or other relaxation techniques to reduce stress are commonly recommended. Women taking oral hormone supplements should talk to their doctor about other treatment options.

2) **Other triggers**

Stress, irregular meals and sleep patterns, women on oral hormone pills and medications.

ii) **Medications**^[7]

Your doctor may prescribe medication to prevent or stop an attack of migraine.

Commonly used drugs to prevent an attack (migraine prophylaxis) include:

- Beta-blockers (eg propranolol), tricyclic antidepressants (eg amitriptyline) and pizotifen. The first of these two medications can also be used in different doses to treat other conditions.
- Prophylaxis medications are only generally given if the migraines and dizziness are severe, and triggers to your migraines have been investigated and avoided if present.

Drugs used to stop an acute episode of migraine headache include:

Amerge, imitrex, maxalt and zomig. Although some of these medications are available from your chemist, always seek your GP's advice before trying them.

iii) **Vestibular rehabilitation (balance exercises)**^[5]

Some patients may experience movement-evoked dizziness which may be secondary to a balance organ related component to their symptoms. In this case tailored exercises can be given which evoke symptoms of dizziness in a mild and controlled way. These will help desensitise the system or promote recalibration of the system (if there is an underlying imbalance between the two balance organs). Other patients with migraine associated vertigo become very visually sensitive (visual vertigo) where busy visual environments such as in supermarkets, shopping centres, travelling on escalators can evoke imbalance or dizziness. In this case tailored visual exercises can be given to desensitise the visual system, thus decreasing your symptoms.

Useful websites

- Migraine associated dizziness factsheet available at www.neuropt.org/files/migraine_associated_dizzinees.pdf
- www.earassociates.com/condition-migraine-associated-dizziness-san-jose-ca.html
- www.dizziness-and-balance.com/disorders/central/migraine/mav.html

References

- 1.) www.earassociates.com/condition-migraine-associated-dizziness-san-jose-ca.html
- 2.) Kayan, A. and Hood,JD:Neuro-otological manifestations of migraine. Brain 107:1123, 1984
- 3.) Selby, G and Lance, JW: Observations on 500 cases of migraine and allied vascular headaches. J. Neurology Neurosurgery and psychiatry 23:23,1960
- 4.) BUPA factsheet
- 5.) Migraine associated dizziness factsheet available at www.neuropt.org/files/migraine_associated_dizzinees.pdf
- 6.) www.vestibular.org
- 7.) Balance 2010 - Migraine and dizziness lecture by RJ Tusa.

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