Vestibular disorders information

What is it?
The vestibular system is located within the inner ear and contributes to our balance system and sense of moving in space. The vestibular system is important for balance, coordination, and eye control.

Problems with the vestibular system can cause the following symptoms:
- feeling of the room spinning (vertigo)
- dizziness
- nausea and/or vomiting
- ringing in the ears
- difficulty with vision
- loss of balance.

Common types of vestibular disorders:
Benign paroxysmal positional vertigo (BPPV)
- BPPV is the most common disorder of the vestibular system. BPPV produces a brief, intense sensation of spinning, which occurs suddenly with a change in head position. This is often associated with nausea and/or vomiting.

Vestibular neuronitis/labyrinthitis
- Vestibular neuronitis, a sudden onset of a constant, intense spinning sensation that is usually very disabling. Nausea, vomiting, unsteadiness while walking, and difficulty with vision are also common.
- Labyrinthitis has the same symptoms as vestibular neuronitis but also affects the hearing apparatus, leading to hearing loss or ringing in the ears (tinnitus).
- They are both thought to be caused by viral infection which affects the vestibular or hearing nerve.

Meniere’s disease
- Causes recurrent attacks of spinning sensation, and nausea, fluctuating deafness, ringing or hissing in ears, fullness and pressure in ears.
- It is caused by a build-up of fluid inside the inner ear, which interrupts the signals of the nerves.

Stroke
- While people are often concerned that their symptoms may be caused by a stroke, it is actually a very uncommon cause of vestibular symptoms, if no other abnormalities of brain function are present.

BPPV is caused by blockage of one of the inner ear canals by small particles of debris. When the head is still, gravity causes the debris to clump and settle. When the head moves, the debris shift. This sends false signals to the brain, producing profound dizziness.

BPPV can often be treated by a series of specific movements to dislodge the particle and unblock the inner ear canal.

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Assessment

The medical team and physiotherapists will ask you detailed questions to ascertain when your symptoms started, aggravating factors and your previous medical history. The physical assessment will involve movement of your head and eyes, movement of your body into certain positions and an assessment of your standing balance and mobility.

The aim of the assessment is to bring on your symptoms, to accurately determine the cause of the problem.

The person may be required to have any number of the following investigations:

- A CT (Computerised Tomography) - scan of the brain (sometimes also called a CAT scan).
- An MRI (Magnetic Resonance Imaging) scan - another specialist scan of the brain.

These are used by the medical team to rule out other disorders causing your symptoms, such as stroke when they are suspected.

Treatment

In the emergency department, the medical and nursing staff will closely monitor symptoms. Medications (either tablets or injections) may be given to help the vertigo symptoms and nausea. These do not cure the disease, only relieve the symptoms. Some people will need to stay in hospital for management of their symptoms especially if they are not able to walk safely.

Treatment for some conditions, such as BPPV, can be commenced in the emergency department. This treatment involves the physiotherapist or doctor moving the patient's head and body through a specific pattern of movement to move the particle and unblock the inner ear canal. Other treatments provided by the physiotherapist may involve an exercise program for the patient to complete independently.

A short course of corticosteroids (prednisone/prednisolone) may be prescribed to accelerate recovery in vestibular neuritis.

Follow up

When a vestibular condition is suspected or confirmed, ongoing management is required. This is best provided by a physiotherapist trained in vestibular disorders. If this is required, a referral will be made to the relevant outpatient physiotherapy service for follow up management. During these appointments please bring any relevant medical letters or scan results.

To contact the vestibular service please call the hospital and ask for the physiotherapy department and they will be able to answer your calls or direct you to the right number to call.

How can I or my family help?

It is common to experience some fluctuating symptoms of vertigo for a period after the initial attack, although they should progressively settle down.

Continuing any exercises given to you by the physiotherapist is the best way to recover and regain your balance. Even though these may make you feel a little dizzy, avoiding them will slow your recovery.

Contact your G.P. or the physiotherapy department you were referred to, if symptoms persist or return after going away completely. If you develop new symptoms or have a major increase in symptoms, then contact your G.P. or return to the emergency department.

Seeking help

In a medical emergency go to the nearest hospital emergency department or call an ambulance (dial 000).

Do this if:

- the person loses strength in any limbs
- The person is unable to speak, swallow or has a facial droop.
- The person is unable to walk independently or their ability to walk deteriorates significantly.

For more information on vestibular disorders view the follow website. www.vestibular.org/educational-resources.

Disclaimer: This health information is for general educational purposes only. Please consult with your doctor or other health professionals to make sure this information is right for you.