Dizziness and Balance Disorders

Dizziness
Dizziness is one of the most common health problems experienced by adults.

The word ‘dizziness’ is often used to describe symptoms ranging from a sense that the patient or the room is spinning or moving (vertigo), to a loss of balance, unsteadiness, giddiness, light headedness, or weakness. People may also experience nausea, fatigue, blurred vision and difficulty concentrating. Symptoms may be constant, or may occur in episodes lasting from seconds to days.

Balance
The sense of balance is controlled by signals to the brain from three sensory systems:

- Eyes (vision).
- Movement sensors in the skin, muscles and joints (proprioception).
- The balance organs in the inner ears (vestibular system). The vestibular system is made up of five balance organs which respond to different types of movement. Three of these organs are fluid filled loops (semicircular canals) which respond to the rotation of the head, in addition to two otolith organs (saccule and utricle) which detect gravity and back-and-forth motion.
Good balance depends on at least two of these three sensory systems working well. If one system is not working, signals from the other two sensory inputs help to keep you balanced. However, if the brain cannot process signals from all of these systems, or if the messages are contradictory or not functioning properly, you may experience loss of balance.

INVESTIGATING BALANCE PROBLEMS
The causes of dizziness or balance disorders can be hard to find. Dizziness may occur for a number of reasons, including problems of the inner ear, brain or nerve disorders, or the side effects of some medications. Anxiety can also contribute to dizziness and balance problems.

Sometimes a referral to a specialist such as an Ear, Nose and Throat Specialist or Neurologist is necessary. Modern diagnostic tests to investigate vestibular system disorders can be completed at some specialist audiology clinics.

COMMON CAUSES OF DIZZINESS
Dizziness rarely indicates a serious or life-threatening condition, even though it can be very disabling. Symptoms will often disappear without treatment.

Inner ear (vestibular) disorders cause about half of all dizziness cases. Of these, about half are due to the following fairly common causes:

- **Benign Paroxysmal Positional Vertigo (BPPV)** involves intense, brief episodes of dizziness which is often associated with moving the head quickly, particularly when tilting the head upwards, turning over in bed or sitting up quickly in the morning. It occurs when particles in the balance system which usually detect movement, break loose and fall into the wrong part of the semicircular canals in the inner ear. This gives a false sensation of spinning (vertigo). The cause of BPPV is not known, but it may be a natural result of aging and can occur with head trauma.

- **Acute Vestibular Neuritis or Labyrinthitis** is inflammation of the inner ear which can cause sudden, intense vertigo. This can persist for several days, with nausea and vomiting and be very disabling requiring bed rest. Fortunately, vestibular neuritis generally subsides and resolves on its own. While the cause of this condition is unknown, a viral infection can sometimes cause this.

- **Meniere’s Disease** involves the build-up of fluid pressure within the inner ear. This leads to sudden episodes of vertigo lasting 20 minutes or longer, which is accompanied by fluctuating hearing loss, the feeling of fullness in the ear, and buzzing or ringing in the ear (tinnitus). The cause of Meniere’s disease is unknown.

- **Vestibular Migraine** with or without headache, can cause vertigo lasting from minutes to hours. Attacks may be triggered by quick head turns, being in a crowded or confusing environment (such as a supermarket), when in a vehicle, or even watching movement on TV. Vestibular migraine may also cause unsteadiness and can be accompanied by nausea, light and sound sensitivity.

Anxiety and stress are known to exacerbate symptoms of dizziness or vertigo, but can also be the most common cause of dizziness not related to the inner ear. Other causes include problems related to the brain and other medical disorders such as low blood pressure.

COPING WITH A DIZZINESS PROBLEM
Treatment for vestibular disorders varies, depending on the diagnosis and severity. In mild cases, the symptoms may go away on their own as the vestibular system heals, or the brain and nervous system learn to compensate. When symptoms persist, some patients can be cured completely. In other cases, the symptoms can only be controlled but not cured entirely. Treatments may include medication, changes in diet, counselling, simple home exercises, physical therapy and in rare cases, surgery.

Vestibular rehabilitation is a physiotherapy program to help compensate for vestibular system disorders. The program may include balance activities and eye movement exercises, easily practiced at home. The activities restore the best use of the remaining vestibular function, vision and the sensation in their legs and feet to help patients keep their balance.

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