I feel the earth move...

BY Dr LEE MOON KEEN

GIDDINESS is a common complaint. Even young children can recognise and attempt to describe this sensation. It is many things to many people, but mostly it is not pleasant, and almost always tinged with a feeling of dread, as if something is seriously wrong with the body.

Is this awareness “hard-wired” into our brains? Could aeons of survival from near-fatal bleeding, heart attack or stroke have left indelible imprints on our collective consciousness?

People use the terms giddiness, dizziness, “funny turn” and their local equivalents “pening/pusing” and “wan”, mostly to convey a feeling of unsteadiness and imbalance.

Vertigo is an illusion of rotation that can be induced in a normal person by spinning at constant speed for 20 seconds and then suddenly stopping, for example, stepping off a carousel. – APpix

If there is a clear sensation of rotation or movement (while the subject is clearly stationary), this perception of dysequilibrium is technically known as vertigo. Your doctor will have to differentiate vertigo and its milder equivalents from pre-syncpe (a near-faint), epileptic seizure and panic attack. A number of conditions can cause vertigo. A single attack of acute, isolated spontaneous vertigo lasting a day or more is largely due to either vestibular neuronitis or stroke of the cerebellum (hind-brain). The latter condition, although important to diagnose, is fortunately uncommon.

In the vast majority of people, recurrent vertigo is due to benign paroxysmal positional vertigo (BPPV), Meniere’s disease or migraine. Although it is frequently suspected, stroke very rarely causes vertigo as an isolated symptom.

Contrary to popular belief, high blood pressure (hypertension) itself does not cause lightheadedness, much less vertigo. Lightheadedness may however occur if the blood pressure falls for any reason, including response to blood pressure medications.

What is vertigo

Vertigo is an illusion of rotation caused by asymmetry of neural activity between the paired specialised structures, the vestibular nuclei in the brainstem. It can be induced in the normal person by spinning at constant speed for 20 seconds and then suddenly stopping, for example stepping off a merry-go-round.

You may have noticed that dancers who have completed a series of spins will jerk their heads in the opposite direction – this prevents vertigo (and falling to the floor!).

Vertigo results from damage to any portion of the vestibular pathway, which comprises:

1. The semicircular canals in the inner ear
2. The vestibulo-cochlear or VIIIth cranial nerve
3. The vestibular nuclei in the brainstem.

Some salient features of vertigo include:

- The symptom is always temporary. Even after destruction of the vestibular nerve, the symptom will disappear within a few days due to the process of vestibular compensation.
- Vertigo is worsened by head movement. Those patients who are “dizzy all the time” and can easily move without discomfort do not have vertigo.
- People with vertigo do not lose consciousness.

Not infrequently, there is confusion and overlap between vertigo and panic attacks, both being common conditions. A mixed picture often ensues. The following scenarios often emerge after careful study of the symptoms:

- A person with undiagnosed vertigo subsequently develops panic attacks. They occur as a result of anticipation and dread of the frightening attacks.
- A person with anxiety is misdiagnosed as vertigo, for example when the complaint consists of a mild disturbance of balance while standing or walking, with momentary illusions of motion. The symptoms usually occur in specific places or situations, for example, in elevators or crowded places, while driving, and so on.

Vestibular neuronitis

Also known as labyrinthitis, this common condition is believed to be caused by a viral infection. It is of abrupt onset and generally improves over several days. Recovery can be expected in six weeks.

Treatment is directed at suppression of symptoms. This includes medication in the form of vestibular relaxants, followed by vestibular exercises. Cawthorne-Cooksey exercises are a useful regimen for which your doctor can provide guidance.

Benign paroxysmal positional vertigo (BPPV)

This is the commonest cause of recurrent attacks of vertigo. The feeling...
of imbalance is triggered by sudden head movements: turning around in bed; attempting to reverse the car; lowering the head on to the dentist’s chair; and looking up (hanging up the washing, "top shelf vertigo" at the supermarket).

The attacks occur in bouts lasting for some weeks, with recurrence in some cases. The prevailing Epley’s canalithiasis theory holds that BPPV is caused by the movement of stray otoconia particles (“ear rocks”) within one of the semicircular canals of the ear, although this idea is not accepted by all (including this author).

Your doctor may attempt treatment with the Particle Repositioning Manoeuvre of Epley, for which variable success rates have been reported.

Otherwise, since remission is to be expected, reassurance and vestibular relaxant medications are all that are required.

Vestibular rehabilitation is then completed with vestibular exercises. Since the purpose of rehabilitation is to get the patient back to normal activity, any “alternative” activities which enhance balance such as yoga, tai chi, and even martial arts can also be considered.

In addition, tai chi and yoga both encourage relaxation, which may be helpful for those who have anxiety accompanying their dizziness or imbalance.

**Migraine-associated vertigo**

This is another cause of vertigo that is recognised with increasing frequency now that the condition has been more clearly defined. The sufferer may or may not have classical migraine headache. A family history of vertigo and/or migraine headache is often encountered. Treatment consists of recognition of this condition, avoidance of trigger factors and preventive treatment for migraine.

**Meniere’s disease**

This is an uncommon condition, which causes severe and increasingly devastating attacks of vertigo, usually leading to loss of hearing. This condition requires prompt attention by a Ear, Nose and Throat (ENT) specialist. Rare causes of vertigo are brain tumour, multiple sclerosis, trauma and toxins.

Finally, medications as a cause of dizziness may be overlooked unless specifically considered. Your doctor will require a complete list of medications, both Western and alternative, in order to verify this.

In conclusion, while giddiness is a common and debilitating complaint, it is seldom an indicator of serious medical disease. Consulting your doctor will usually provide reassuring news, and you can expect treatment to provide welcome relief.

This article is contributed by The Star Health & Ageing Panel, which comprises a group of panellists who are not just opinion leaders in their respective fields of medical expertise, but have wide experience in medical health education for the public. The members of the panel include: Datuk Prof Dr Tan Hui Meng, consultant urologist; Dr Yap Piaang Kian, consultant endocrinologist; Dr Azhari Rosman, consultant cardiologist; A/Prof Dr Philip Po, consultant geriatrician; Dr Hew Fen Lee, consultant endocrinologist; Prof Dr Low Wah Yun, psychologist; Dr Nor Ashikin Mokhtar, consultant obstetrician and gynaecologist; Dr Lee Moon Keen, consultant neurologist; Dr Ting Hoon Chin, consultant dermatologist; Assoc Prof Khoo Ee Ming, primary care physician. For more information, e-mail starhealth@thestar.com.my

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