

# Dizziness

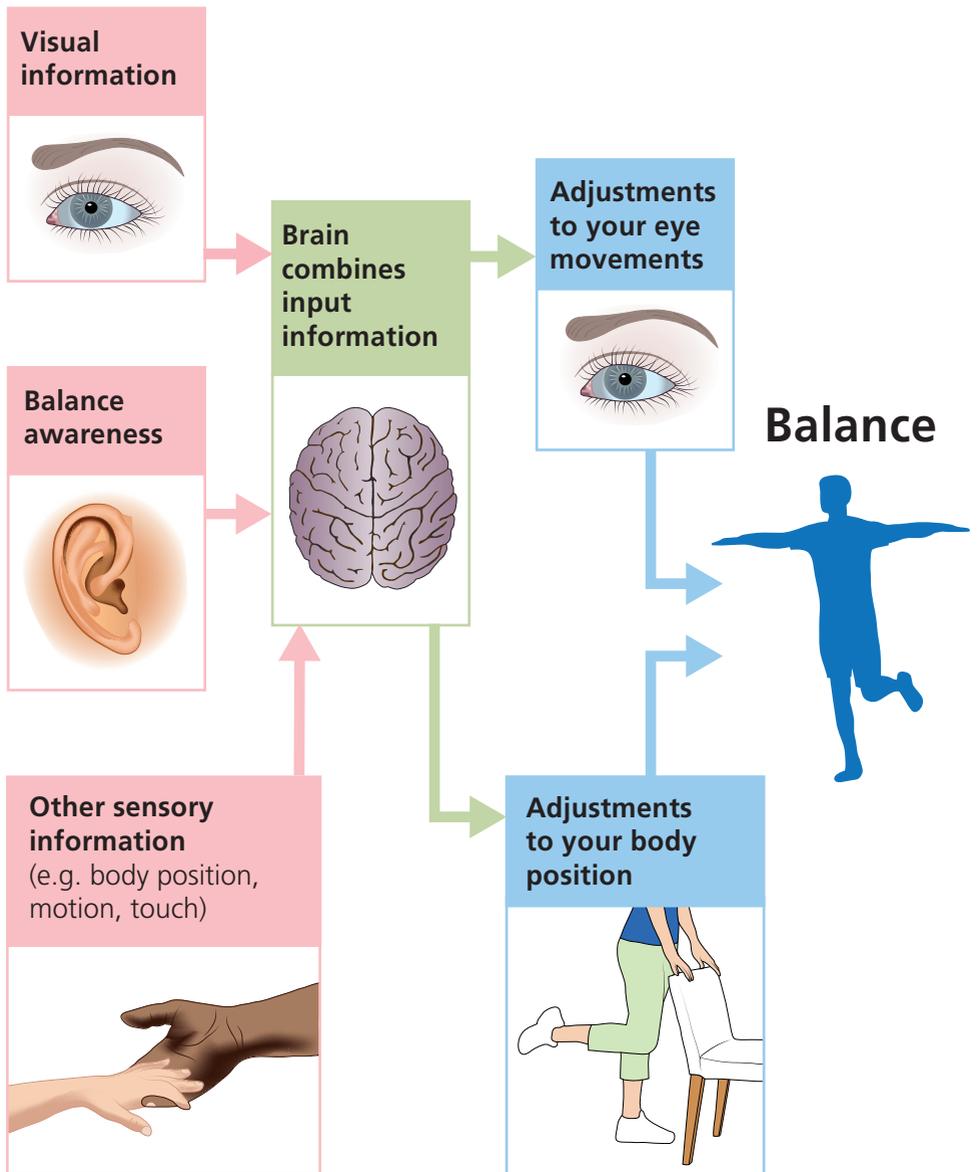


## Information for patients

Ear Nose and Throat



# How do we normally control our balance?



There are three different balance senses that send the brain information to help control our balance:

1. The eyes send information to the brain about where you are and where you are going. Approximately 70% of our balance comes from vision.
2. The inner ears (also called the vestibular system) send the brain information about head movements such as looking up, bending down and turning your head as well as movements such as moving in a car or in a lift. Approximately 15% of balance comes from the inner ears.
3. Muscles and joints (also called the proprioceptive system) send the brain information about the body's position and how the body is moving. Approximately 15% of balance comes from muscle and joints.

If there is a problem with the brain or any of the above sensors then you may feel dizzy.

An easier way to think of it is to liken all of the above to a two engine aeroplane: To fly in a straight line you need good wings (muscles/joints), good engines (balance organs in the inner ear), clean cockpit windows (eyes) and a functioning pilot (brain). If there is a problem with any of these parts of the plane it's going to be a wobbly unpleasant journey!

## The conflict between ears and eyes

The inner ear and eyes are closely linked. With every movement of the head, the inner ear makes a fine adjustment to our eyes to ensure that what we are looking at remains stable and in focus. It is no wonder that when a problem occurs with the inner ear that for some time after you feel very disorientated upon head motion.

Ironically, after a temporary inner ear injury, it is natural to become more reliant on vision to stay balanced. This is why in the dark, unfamiliar or uneven surfaces you can feel more off balance. It is OK to rely on the eyes for a short period of time, but some people become continuously over reliant on vision to maintain balance.

This may cause feelings of imbalance problems particularly in busy environments such as city streets, watching fast moving images on screens and where there are a lot of vertical and horizontal patterns such as supermarkets. This is called **visual vertigo** and may need to be addressed by the hearing/balance therapists

## What is dizziness?

Dizziness includes feeling:

- off-balance
- giddy
- lightheaded or faint
- like you're spinning or things around you are spinning (vertigo)

## How can you treat dizziness yourself?

Dizziness usually goes away on its own. But there are things you can do to take care of yourself while you're feeling dizzy.

### Do

- lie down until dizziness passes, then get up slowly
- move slowly and carefully
- get plenty of rest
- drink plenty of fluids, especially water
- avoid coffee, cigarettes, alcohol and drugs

### Don't

- do not bend down suddenly
- do not get up suddenly after sitting or lying down
- do not do anything that could be dangerous while you're dizzy, like driving, climbing a ladder or using heavy machinery
- do not lie totally flat if you feel like things are spinning
- do not use pillows to prop up your head

## **What can be done for my balance problems?**

Lots can be done to make it easier to live with balance problems. This may range from simple adjustment in diet and lifestyle through to home exercises and rehabilitation therapy offered by physiotherapist and hearing/balance therapists. Occasionally medication might need to be prescribed to help. Balance problems rarely require surgery.

## **Why does it take so long to reach a diagnosis?**

Some balance problems are very straight forward to diagnose and do not even need specialised tests. Other problems are far more complex requiring multiple tests. Often Dr's have to look for patterns over time to get a better understanding of what is going wrong. Occasionally they may need to use the help of colleagues in other departments such as the heart (cardiology) and brain (neurology) specialists to help us. This all takes time.

## **What can I expect on the day of my appointment in ENT**

Once you have been asked questions about your balance, general health, medications and current lifestyle you may be sent for further testing. These may include: a hearing test, balance testing and possible scans. These may be done on the day or you may need to come back for these tests. Once the test results come back your doctor will discuss them with you and provide treatment in the form of lifestyle advice, exercises or medication to help you cope better with your symptoms. You will be monitored for a period after this and once your symptoms are better managed you can be safely discharged back to your GP. Balance problems take time to settle but try to be patient and determined as with our support it will pay off.

## **I have been told to change my diet?**

We know that certain balance conditions such as balance migraines or Menieres disease can be irritated by some of the foods or additives to foods that we eat. In Menieres disease you may be asked to reduce the amount of salt in your diet and in balance migraines you may be asked to avoid or be aware of the effects of caffeine, chocolate, cheese, alcohol, nicotine containing products and take-away food (monosodium glutamate MSG). Often you will be asked to keep a food diary to help look for possible food triggers.

## **Can stress affect my balance?**

We know that excessive stress may act as a trigger in patients who are migraine sufferers and therefore may cause an attack of imbalance.

In general your personality type may also affect how you deal with your balance problems. Some people are very practical and simply get on with their life whilst others are more anxious and lose confidence. This anxiety can delay or prevent recovery and may need to be dealt with by your GP or referral for other therapy (e.g. cognitive behavioural therapy CBT or mindfulness).

Naturally people are curious and the vast amount of information available on the internet can trigger stress through confusion and fear. Try and avoid "Dr Google".

It is important to realise that we may not be able to cure balance problems but we can help you make changes to your lifestyle to help it much easier to cope and live with.

## **Why have I been put on medication for my balance**

When you present to your GP or A&E with balance problems they may start you on medication to help with the acute symptoms of spinning. Whereas most medications are harmless, prochlorperizine or stemetil can cause problems if taken for extended periods as it does not allow your brain to adapt to any potential poor signals coming from your ear. As a rule take these emergency medicines whilst you are having attacks of spinning or severe imbalance, but do not take them for periods longer than a week.

When you see the balance specialists they may ask you to come off of certain medications or alter medications. They will explain how to take them and possible side effects to be aware off.

## **Can activity or exercise make my balance worse?**

No, in actual fact, outside of an acute attack we would encourage you to be as active as possible. The more you move about the more the brain learns to adapt and compensate for poor signalling if you have an inner ear problem. As with everything you would need to perform activities in a safe environment especially if you do feel unsteady. Start slowly and gradually increase the length of activities. We would suggest walking, Tai Chi, Yoga or Pilates. If you do class related activities you will need to inform your instructor that your balance is reduced.

## **What can I use to help with my balance besides exercise?**

Besides activities we would also suggest trying to reduce stress levels, keep to regular sleep patterns and keep well hydrated. Whilst recovering it is advisable to avoid excessive alcohol as it can affect your balance.

You may need to consider walking about with a stick or frame initially but as your confidence grows and your brain adapts we would suggest using them less frequently. Wear flat supportive shoes and always have a friend, partner or family member about particularly in the evenings or in the dark where there is less visual information. This also goes for walking in unfamiliar environments or uneven sloping surfaces. Over time try to regain natural independent movement.

## **Can I drive?**

As a general rule as long as you have warnings that you are having a balance attack and you can safely stop a vehicle without potentially injuring yourself, passengers or fellow road users then, yes you can drive. However if you have spontaneous unprovoked debilitating attacks of dizziness then you will have to inform the DVLA. If you have a group 1 licence (private cars/motorcycles) you can restart driving once the condition is stable. For commercial vehicles (Trucks/buses/) then your licence (group 2) may be suspended for up to a year until the condition is stable.

If you have been told to inform the DVLA and you do not it is our duty as Health Care professionals to inform the DVLA even without your permission. You will be informed in writing that we are doing so.

## **I have been told that I have Benign Paroxysmal Positional Vertigo (BPPV), what is that?**

BPPV is a very common balance condition and can be treated fairly easily by an experienced Health Care professional.

The balance organs in the inner ear have two parts to them. One part contains sensors that detect acceleration or deceleration in a horizontal, vertical and side to side plane. It essentially relies on a jelly substance weighted by calcium crystals that respond to gravity's pull.

If you have a serious inner ear infection, a balance nerve infection, a blow to the head or are low in Vitamin D these crystals can break off and float into the balance system that senses head motion. As a result when you look up, down or roll over the room may momentarily move.

Your Doctor will check for this. If they find it they will try a repositioning manoeuvre to relocate the calcium crystals. This is a painless procedure but we do suggest that you do not drive after it. It usually works in up to 85% of patients. Some patients require further manoeuvres. You may be instructed to sleep propped up in bed (above 45 degrees) for two nights following the manoeuvre.

Occasionally due to serious neck, heart or blood supply problems to the brain we cannot perform the manoeuvre safely. You may be provided with exercises (Brandt-Daroff) to perform at home instead.

This condition can come back in about half of patients within the first year.

## **I have been told I have a possible balance or vestibular migraine**

Migraines are very common and affect up to 10% of the general population. We know that within this group 60% of people may suffer with balance and hearing problems. Migraines are actually known as the great mimickers and can cause symptoms very similar to other balance problems.

Balance migraines can occur without headaches or visual disturbances. The symptoms can include pressure, muffled hearing, spinning and disorientation on head movement. Sufferers often want to escape to a dark quiet room to avoid noise and light. Once the attack has passed you can be left feeling tired and “hung-over”

These attacks often follow triggers: These may include stress, altered sleep patterns, dehydration, monthly changes in hormones, weather changes, smoking and food types (Chocolate, caffeine, red wine, Flavour/taste enhancer-MSG, rich mature cheese, sweetners)

Tests including scans and balance testing are often inconclusive.

We often rely on lifestyle changes (leaflet provided) to help control of stress/anxiety and occasionally trial you with different anti-migraine medication to stabilise the attacks and make it easier to cope with.

## **I have been told I have Menieres disease (MD)**

MD is a relatively uncommon balance condition. It does however cause recurring attacks of pressure, low pitched ringing, hearing loss and spinning. These episodes last from a few hours up to 24 hours but no longer. It is due to problems with the fluid that bathes the inner ear. There can be an overlap with balance migraines.

MD usually goes after 10-15 years but unfortunately damages hearing too.

Because of the unpredictable recurring nature of the condition it may be worth letting the DVLA know. Most of the time sufferers have enough warning to stop a vehicle and seek safety without endangering themselves or fellow road users

Treatment consists of low salt diet, long term medication (Betahistine, water tablets) and injection of steroids into the middle ear (through a grommet). Occasionally an antibiotic called gentamycin might be injected into the ear to chemically destroy the balance organ. There is a small risk of hearing loss with this. Surgery to cut nerves or remove the balance organ is a last resort and rarely performed.

## **I have been told that I have had Labyrinthitis/Vestibular Neuronitis/Vestibulopathy**

Sometimes through a viral infection, decreased blood supply or for uncommon reasons the hearing and balance organ stops working (Labyrinthitis).

If it is just the balance organ that is not working then it can be called vestibular neuronitis/vestibular weakness or vestibulopathy. This is an unpleasant condition where the room may spin for a number of days with nausea and vomiting and reluctance to move your head off the pillow.

It usually settles with medication, but this medication should only be taken for the duration of severe symptoms and not for longer than two weeks.

For some time after movement of your head may lead to feelings of disorientation and imbalance. This will be worse in dark or unfamiliar environments. This is happening as the tracking of your eyes on head motion is weak. The more you do the better this will become as the brain adapts to the poor signal from your inner ear. This is why we do not like you taking prochlorperazine or stemetil long term as this stops the brain adapting.

If you have not had scans you will probably have one after your visit and you will be encouraged to remain active and started on gaze stabilization exercises ( VOR-leaflet provided). You may also be provided exercises to release tension in your neck and help with stability in motion (Cawthorne-Cooksey)

This condition will settle but at times of stress, fatigue or illness you may feel slightly off balance.

## **I have been told that I have Superior Canal Dehiscence Syndrome**

This rare condition where the bone over the balance organ has become thin exposing the balance organ to pressure changes within your head.

You may hear internal noises such as your food digesting, your joints creaking, your eyeballs moving and your voice echoing in your head.

Any pressure changes such as straining or loud sudden noises may make you go dizzy and lose your balance.

Normally you will have CT and MRI scans as well as specialized balance testing to confirm the condition.

Unfortunately you may have to live with the condition if it is not too life changing or if your health will not allow surgery.

Surgery consists of blocking part of the balance organ via the back of the ear or making a small window in the skull to repair the defect in the roof above the inner ear.

## Can I get any further information on dizziness?

The following are some useful websites which are also recommended by the Department of Health:

**Action on Hearing Loss** (previously The Royal National Institute for the Deaf) has some useful factsheets on its website regarding balance and ear problems.

- [www.actiononhearingloss.org.uk/supporting-you/factsheets-and-leaflets.aspx](http://www.actiononhearingloss.org.uk/supporting-you/factsheets-and-leaflets.aspx)

**The Menière's Society** has a self help book on vertigo and dizziness which can be downloaded.

- [www.menieres.org.uk/vertigo\\_and\\_dizziness\\_book\\_download.htm](http://www.menieres.org.uk/vertigo_and_dizziness_book_download.htm)

**The Brain and Spine Foundation** have produced a book on dizziness and balance problems.

- [www.brainandspine.org.uk/dizziness-and-balance-problems](http://www.brainandspine.org.uk/dizziness-and-balance-problems)

**NICE (Department of Health)** also publishes **Clinical Knowledge Summaries** which are a good source of information.

- <http://cks.nice.org.uk/vertigo#azTab>
- <http://cks.nice.org.uk/menieres-disease#!topicsummary>

**Labyrinthitis.org.uk** is a website developed by two patients to give advice and support to other patients with a similar condition.

- [www.labyrinthitis.org.uk](http://www.labyrinthitis.org.uk)

**Vestibular Disorders Association**

- [www.vestibular.org](http://www.vestibular.org)

# Contact details



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