

mechanisms in the brain may be upset by the changes in blood supply due to stiffening in the arteries which is a normal occurrence in older people. Unsteadiness can be greatly helped by the use of a stick (or smartly rolled umbrella!) which increases the brain's knowledge of the ground ahead (one of the ways it gets information when other parts of the balance mechanisms are disturbed). Make sure that your vision is as good as it possibly can be and wear glasses when they are needed. Remember that some lowering of vision or difficulty in reading can actually be caused by the balance mechanism when the eyes are tending to move.

General practitioners can do much to alleviate these symptoms when they recognise that they are due to balance disturbance and not other things. There are many tablets which help to stop the abnormal messages from the inner ear reaching the brain and your GP can advise you about these.

They are very similar to the seasick tablets that transatlantic yachtsmen use. Like seasickness, balance disturbance may

also produce nausea and even vomiting. Again there are a number of medicines which can help to control this and they can also be given as a suppository or a small tablet placed against the lining of



the mouth where absorption takes place even if the stomach is not up to receiving anything!

The important thing is to have a positive attitude towards balance disturbance and not to be frightened by it. In the vast majority of cases the symptoms do improve with time as the central compensatory mechanism in the brain learns to cope with the damaged system.

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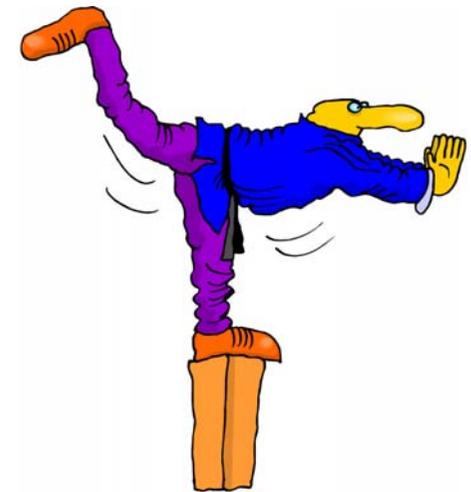
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Check out our range of leaflets or visit our website at www.nadi.ie for further information.

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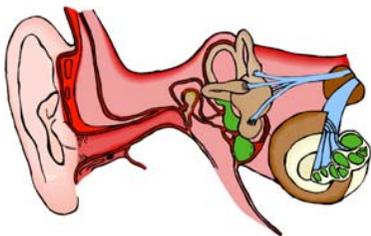
National
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Balance Problems

First of all it helps to understand a bit about how the balance mechanism works. In each inner ear there are little semi-circular canals filled with fluid which move when we move our head about.

There are nerves running to the central balance mechanism in the brain, a sort of computer that helps us to keep us upright.



The Ear - Cut Away View

This central balance computer is called the vestibular nucleus. Messages from this balance centre are passed forward to the eye muscles which control eye movements. This is to help us fix on an object, even though we are moving our head or our body around in our environment. This is very important to prevent blurring of vision which would occur if the eyes were not held still on the object of our choice. This explains why in many balance disturbances the eyes cannot be held still, slight blurring of vision can occur and where there is very marked abnormal eye movement (a thing doctors sometimes refer to as nystagmus) it is possible to get the impression that the environment is not steady, flickering, or actually spinning round and round. Although this can be a very unnerving experience, it is caused only by these abnormal eye movements, which in themselves are totally harmless. The vestibular nucleus or balance centre also controls indirectly the muscles which help to keep us upright. They alter the

tension in these muscles, particularly in the head and neck to stop us falling over.

Problems arise where there is any abnormality in the balance mechanism, either in the inner ear or in the central connections



The control of our eye movements, and visual fixation may be lost resulting in blurring of vision,

difficulty with reading, feelings of rotation and also unsteadiness and there is a wide variety of other symptoms which are related to these other abnormalities but may be interpreted differently by the brain. These can include feelings of dissociation or detachment which may sometimes be interpreted as psychiatric symptoms, although they are not. Of course not everybody has all of these symptoms and the symptoms themselves may vary widely from time to time, although they are caused by the same underlying abnormality. The difficulty for doctors is actually finding out where the problem is in the balance mechanism. Is it the inner ear? Is it in the central connections of the balance mechanism in the brain? This can sometimes be caused by a kind of migraine.

To work out what is happening it is necessary to have special tests done at a hospital where these facilities are available. Often, however, the symptoms get better with treatment from your GP, and in any case most symptoms will improve with time. This is because

although there is damage to a part of the balance mechanism (often the results of a short lived and very innocent viral infection) it can be overcome automatically. What happens is that in the central balance computer there is a mechanism for compensating for these abnormalities that can occur. It's rather like the pilot of a twin-engine airplane trimming the plane if one of the engines stops. Sometimes this balance trimming mechanism doesn't work very well, or it may work well for a while and then be upset by some unrelated illness or stressful situation. This can sometimes mean that the symptoms return although the original balance disturbance (for instance a virus in the inner ear) was long past. The return of symptoms does not necessarily mean that this is a "new disease".

Another thing that balance disturbance does is to stimulate our autonomic or automatic nervous system. This is the part that controls like the heart rate, the blood pressure, the stomach and bowels, sweating and muscle tension. It is also linked to feelings of anxiety and panic. Very often it is found that people are very worried by even minor disturbances of their balance because they don't know what is going on. This can result in extreme feelings of anxiety or panic which are often worse than the feeling of balance disturbance itself. Knowing what is happening and how the feelings are created often makes people less anxious about them and more able to cope.

In older people the central balance