These conditions are the result of sudden loss of function of the inner ear. This part of your ear has two roles – hearing and balance.

Labyrinthitis is a condition where both of these functions are affected, while with vestibular neuronitis only balance is affected.

**Symptoms:**
- Vertigo (‘spinning dizziness’): sudden onset, usually severe, usually lasting days to weeks. You are usually able to walk, but feel very unsteady in doing so. It may be severe enough to make you vomit or make you feel sick to your stomach. You may still get vertigo symptoms if you suddenly move your head a certain way for several months after your illness.
- Sudden severe one-sided hearing loss if you have labyrinthitis. There is no hearing loss with vestibular neuronitis.
- Ringing in the affected ear if you have hearing loss.
- No other neurologic abnormalities (such as arm or leg weakness, facial slumping or change in your speech). If these are present, you should be tested for other causes of the problem, like a stroke.

**Cause:**
In the majority of cases, no cause is ever found. In others, we can find evidence of infection (viral, or very occasionally bacterial), blood vessel occlusion or immune system malfunction. In some people, we find a pre-existing malformation of the structure of the ear that makes you more likely to get an infection.

**Investigations:**
The main role of your doctor is to rule out other, more dangerous causes, for your symptoms. In the majority of cases, no special tests are needed.

- Hearing test (an ‘audiogram’): is usually done if you have any hearing loss.
- MRI: this is usually done if we are worried that you might have had a stroke as a cause for your symptoms, or if your vertigo doesn’t get better as we would expect it to.
- CT: otherwise called a ‘CAT Scan” might be done if we are worried that there might be a structural problem with your ear or its central connections.
- Balance testing: is sometimes done to see how badly the ear has been damaged. This is done at either the Alfred Hospital or the Eye and Ear Hospital.
Treatment:
Over time, your brain will readjust to the loss of balance function to reduce your sense of unsteadiness. This process is called ‘compensation’, and it is the main mechanism by which you will start to feel better.

If you have lost your hearing, you will sometimes be given some medication to try to get it to come back more quickly. However, in most cases we need to see how much recovery you will get from natural healing.

The short-term aim of treatment is to decrease the nausea and vomiting associated with your vertigo, while compensation occurs. Medications can be used, but we encourage people to try and cope without them as much as possible, as they can interfere with this natural adjustment. Remaining as active as possible speeds compensation.

Typical medications include:
• Anti-nausea medications.
• Medications to dampen the sensations of dizziness, such as steroids, sedatives or antihistamines.
• Anti-viral drugs and corticosteroids, in the case of viral infections.

The longer term aims of treatment are to help you adjust to any long-term damage to your sense of balance, and to compensate for any hearing loss. This is usually based on a combination of exercises to improve your balance (called ‘vestibular rehabilitation or physiotherapy’) and hearing aids if there is any hearing loss.

Prognosis:
The acute attack of vertigo usually lasts a few days with at least partial recovery within a few weeks to months. Some people (15% in one study) may have significant symptoms after 1 year. Recurrent attacks in the same or opposite ear have been reported but are unusual. Some patients may later develop short-lived, acute attacks of vertigo without any hearing loss (called Benign Paroxysmal Positional Vertigo).

If hearing loss occurs, the chance of it recovering depends to some extent on how much loss you have. The worse the loss, the more likely that there will not be any recovery, or that only partial recovery will occur. There are many options for helping you to cope with any long-term hearing loss.