



Meniere's Disease



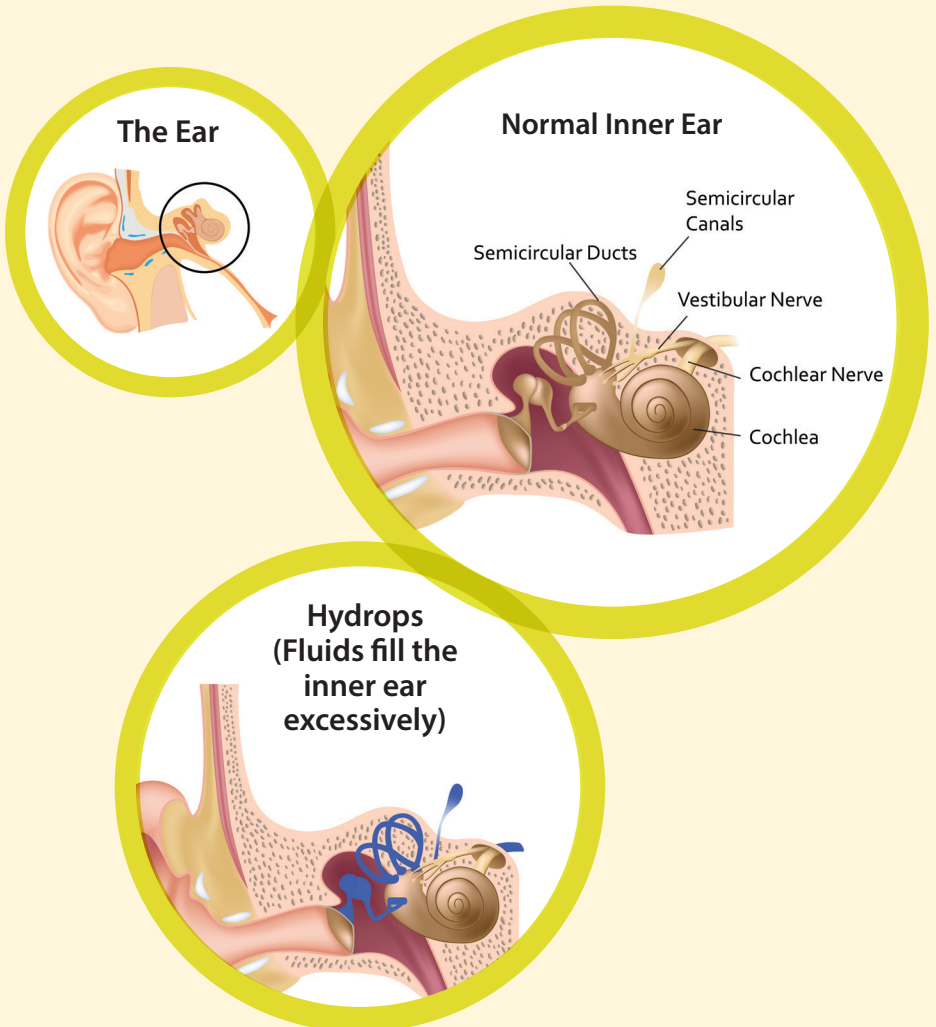
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What is Meniere's disease?

Meniere's disease is a disorder of the inner ear. Although the exact cause is unknown, it is believed to arise from dysfunctional fluid (endolymph) balance of the inner ear. Meniere's disease is a common cause of dizziness. In Western populations, it is estimated that 2 in 1000 people have Meniere's disease. The prevalence of the disease in Asia is significantly lesser, an estimation of 40 in 1000,000 people have the disease.

In most cases, only one ear is affected. However, it may affect both ears in a smaller group of patients. Meniere's disease usually affects individuals between the ages 20 to 50 years old, with no gender predisposition.



What are the symptoms?

The common symptoms of Meniere's disease are:

- Vertigo (spinning attacks)
- Tinnitus (roaring, buzzing, or ringing sound in the ear)
- Feeling of fullness in the affected ear
- Fluctuating hearing loss

Vertigo or spinning attacks, may last from 20 minutes to a few hours. During the attacks, one will be unable to perform normal daily activities. One will also feel sleepy and a sense of being off-balance for a few days. Vertigo often occurs with no warning. In the early stage of the disease, one may experience a feeling of fullness in the affected ear or sporadic hearing loss, especially for low pitch sounds. This may gradually lead to permanent hearing loss.

In rare cases, the patient will experience sudden falls. This is caused by a sudden deformity of the inner ear balance organs, which leads to the activation of the vestibular reflexes. One will feel like he is tilted or falling (although they may be standing straight), and may fall while trying to reposition himself. This is a very disabling symptom as it occurs without warning and can result in severe injury.

How is a diagnosis made?

Some diagnostic tests may be required to check your hearing and balance. These include:

Hearing tests

- Hearing or audiometric test to test for loudness perception.
- Speech discrimination test to test for ability to differentiate between similar sounding words.

Balance tests

- Videonystagmograph (VNG) may be conducted to check the balance function.

Other tests

- Magnetic Resonance Imaging (MRI) scans may also be ordered to rule out the possibility of a tumour of the hearing and balance nerves. Although it is rare, its symptoms can be similar to that of Meniere's disease.

What are the treatments available?

Non-surgical treatment methods are divided into treatment of the acute attack and prevention of future attacks:

- Medications to abort an acute attack include anti-emetics and vestibular suppressants. All patients should have these ready as attacks are unpredictable.
- Measures to decrease frequency of attacks include taking a low salt diet, diuretics and other medications. It is important to avoid stimulants such as coffee, alcohol, smoking and stress.

Most patients respond to such conservative measures but a small number of patients may require more invasive forms of treatment.

Intratympanic injection

In more recalcitrant cases, you may be offered injections into your middle ear (intratympanic injections). Steroid injections are generally safe and offered to improve the fluid balance of the inner ear. This is usually offered before proceeding to Gentamicin, an injection of the vestibulotoxic where antibiotic (Gentamicin) is used to partially ablate the balance function of the affected ear. The intratympanic injections controls vertigo in about 75 percent of the patients. Patients usually feel imbalanced for a while as they adjust to a new level of balance function.

Endolymphatic shunt or decompression surgery

This prevents build-up of pressure in the inner ear, which is believed to be the final common pathway of Meniere's disease. The procedure usually does not affect hearing and controls the vertigo attacks in selected patients.

Labyrinthectomy surgery

The balance and hearing function of the affected ear will be destroyed. It results in very good control of the vertigo attacks but at the expense of losing residual hearing.

What can you do?

- If you have any of the symptoms, you should seek medical attention early to prevent further attacks and slow down hearing deterioration.
- Eat a balanced diet, rest sufficiently, stay physically active and manage stress. Avoid salt, alcohol, caffeine and smoking. If you have vertigo attacks, you should avoid driving, activities at height and swimming.
- Protect yourself from possible injuries, especially during the night. Switch on a night light and ensure the path to the bathroom is free of rugs, furniture or other obstructions.





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