

Meniere's Disease Information:

The cause of Ménière's disease is not known, but it may be related to a fluid imbalance in the inner ear. The inner ear contains fluid called endolymph. In Ménière's disease, too much of this fluid builds up in the inner ear. The resulting pressure affects the sensory systems in the inner ear that maintain balance. Little is known about the cause of endolymph fluid buildup. It may be that too much fluid is produced or that the fluid does not properly drain from the inner ear, or it may be a combination of the two.

Symptoms:

Vertigo attacks that occur suddenly and last from several minutes to hours. The spinning sensation caused by vertigo is often bad enough to cause nausea and vomiting. To reduce this feeling, try lying perfectly still until the attack subsides. Vertigo is not the same as feeling dizzy. Dizziness is feeling unsteady or unstable. Vertigo is a sensation of whirling or spinning. Symptoms of dizziness and vertigo may be caused by many conditions other than Ménière's disease.

Tinnitus: A low-pitched roaring, ringing, or hissing sound in the ear.

Hearing loss: (often low-frequency sounds) that may return to normal after the attack or may be permanent overtime.

Aural fullness: a feeling of pressure or fullness in the ear.

Drop Attacks: Only a few people with Meniere's Disease experience drop attacks. This is a sudden fall while standing or walking. The falls occur without warning, and the attacks are described as suddenly being pushed to the ground. There is usually no loss of consciousness, and complete recovery occurs in seconds or minutes.

Prodrome : Sometimes you may sense that an attack is about to occur. The signal might be:

- An increasing feeling of pressure in the ear.
- Sounds seeming louder than normal.
- Nausea. A few people have nausea before an attack. But nausea can have many causes, so nausea does not always mean that an attack is about to occur.

Risk factors:

Because the cause of Ménière's disease is unknown, it is difficult to predict who will get the condition. You may be at higher risk for getting Ménière's disease if you have:

- Another family member who has this condition.
- An autoimmune disease (such as diabetes, lupus, or rheumatoid arthritis),
- Had a head injury, especially if it involved your ear.
- Had viral infection of the inner ear

Diagnosis:

If the cause of your vertigo is unclear, you may need more tests to determine whether your symptoms are caused by problems in the inner ear or in the brain. Brain-related causes of vertigo (such as stroke, head injury, brain tumors, or multiple sclerosis) are less common.

Additional tests include:

- Balance testing. These tests look for characteristic eye movements that occur when the inner ear is stimulated. The pattern of eye movements can indicate the location of the cause of the vertigo, such as the inner ear or the central nervous system. ECOG can form part of this testing.
- Imaging tests, such as magnetic resonance imaging of the head (MRI) or computed tomography of the head (CT scan), which may be done if symptoms could be caused by a brain problem.
- Hearing tests, to detect hearing loss. This can sometimes document hearing change with attacks



Treatment: Although Ménière's disease cannot be cured, treatment is available to control symptoms and reduce attacks. Unfortunately, no treatment is available to prevent the hearing loss that may eventually occur.

Initial and ongoing treatment

Early and ongoing treatment of Ménière's disease focuses on controlling the symptoms-especially vertigo, a spinning sensation-and reducing the frequency of attacks.

Medications do not cure Ménière's disease, but they can reduce the severity of some symptoms-such as the spinning sensation of vertigo, nausea, and vomiting-and make you more comfortable during an attack.

- Avoiding caffeine, alcohol, tobacco, and stress or any substances or conditions that trigger an attack.
- Eating a low-salt diet to reduce fluid build up in the inner ears
- Taking vestibular suppressant medications (such as antihistamines or sedatives) to calm the inner ear.
- Taking medications such as diuretics to reduce the accumulation of fluid (endolymph) in the inner ears. E.g. hydrochlorothiazide

Surgery for Ménière's disease can cause permanent damage to your hearing. Surgery may be considered for people with Ménière's disease who:

- Have persistent or frequent attacks of severe **vertigo** (a spinning sensation) that do not improve with medication use.
- Have symptoms that are so debilitating that it becomes difficult to get through the events of daily life.
- are affected in only one ear.

Surgeries include:

1. Gentamicin injection. This can be done in the consulting room.
2. Grommets and meniette device
3. Endolymphatic sac decompression, which removes some of the bone surrounding the **inner ear**
4. Endolymphatic shunt, which inserts a tube to drain excess fluid from the inner ear.
5. Vestibular nerve section, which cuts the nerve that controls hearing and balance.
6. Labyrinthectomy, which removes the balance center of the inner ear (labyrinth). This nearly always stops vertigo but also results in total hearing loss in that ear.

Prevention: In most cases, **Ménière's disease** cannot be prevented.

Head Injuries: Wearing a helmet when bicycling, motorcycle riding, playing baseball, in-line skating, or during other sports activities can protect you from head injuries that could lead to Ménière's disease.

Allergies: Treating allergies with desensitization shots and eliminating suspected **food allergens** may reduce the frequency of attacks.

Diet: You may be able to reduce the frequency of vertigo attacks by limiting the amount of salt in your diet and avoiding caffeine, alcohol, tobacco, and stress, which can help reduce stimulation to the inner ear.

Low salt diet: The recommended daily intake for sodium is less than 2,300 mg a day. Evidence exists that restricting sodium to 1,000 mg a day may help those with Ménière's disease. Eating less salt does not have to be difficult. Following are five keys to decreasing salt in your diet:

Read labels, especially on processed foods, to see how much sodium (salt) foods contain.

Ask for low-salt meals at restaurants.

If you use canned vegetables, rinse them thoroughly.

If you drink bottled water, read the label and choose a salt-free brand.

Don't add salt to your food.

Prognosis

The attacks are unpredictable and vary in frequency and severity. An attack can last from hours to days. Most people have repeated attacks over a period of years. Attacks usually increase in frequency during the first few years of the disease but then decrease in frequency. Sometimes, each additional attack damages the inner ear. Eventually the inner ear becomes so badly damaged that it may no longer function properly. The attacks will then usually stop, but you may have:

- Poor balance.
- Permanent hearing loss.
- Residual roaring or hissing in the affected ear.

Ménière's disease normally occurs in only one ear at a time. In as many as half of the people affected, the disease eventually develops in the other ear.

