

MENIERE'S DISEASE

Treatments and drugs

By Mayo Clinic staff

No cure exists for Meniere's disease, but a number of strategies may help you manage some symptoms. Research shows that most people with Meniere's disease respond to treatment, although long-term hearing loss is difficult to prevent.

Medications for vertigo

Your doctor may prescribe medications to be taken during an episode of vertigo to lessen the severity of an attack:

- **Motion sickness medications**, such as meclizine (Antivert) or diazepam (Valium), may reduce the spinning sensation of vertigo and help control nausea and vomiting.
- **Anti-nausea medications**, such as promethazine, may control nausea and vomiting during an episode of vertigo.

Long-term medication use

Your doctor may prescribe a medication to reduce fluid retention (diuretic), such as the drug combination triamterene and hydrochlorothiazide (Dyazide, Maxzide). Reducing the amount of fluid your body retains may help regulate the fluid volume and pressure in your inner ear. For some people a diuretic helps control the severity and frequency of Meniere's disease symptoms. Because diuretic medications cause you to urinate more frequently, your system may become depleted of certain minerals, such as potassium. If you take a diuretic, supplement your diet each week with three or four extra servings of potassium-rich foods, such as bananas, cantaloupe, oranges, spinach and sweet potatoes.

Dietary changes

Modifying your diet can reduce your body's fluid retention and help decrease fluid in your inner ear. Your doctor may suggest you follow these dietary changes to lessen the severity and frequency of Meniere's disease symptoms:

- **Eat regularly.** Distributing evenly what you eat and drink throughout the day helps regulate your body fluids. Eat approximately the same amount of food at each meal. You may also eat five or six smaller meals rather than three meals a day.
- **Limit salt.** Consuming foods and beverages high in salt can increase fluid retention. Aim for an intake of 1,500 milligrams (mg) or less of sodium each day.
- **Avoid monosodium glutamate (MSG).** Some prepackaged food products and prepared restaurant foods contain MSG, a type of sodium. MSG can contribute to fluid retention. Check ingredient labels or ask your restaurant server if the food you're considering ordering contains MSG.

Other lifestyle changes

Some evidence suggests that lifestyle factors may worsen symptoms of Meniere's disease or act as triggers for the onset of symptoms. Your doctor may recommend the following changes to alleviate symptoms or help prevent the onset of symptoms.

- **Avoid caffeine.** Foods and beverages that contain caffeine, such as chocolate, coffee, tea and certain soft drinks, have stimulant properties that can make symptoms worse. For instance, caffeine may make ringing in the ear (tinnitus) louder.
- **Stop smoking.** Avoiding nicotine may lessen the severity of Meniere's disease symptoms.
- **Manage stress and anxiety.** It's difficult to know whether stress and anxiety act as triggers for Meniere's disease symptoms or are the result of having the disorder. Some evidence suggests, however, that managing stress and anxiety may lessen the severity of symptoms and enable you to cope with the disorder. Professional psychotherapy may help you identify stressors and develop strategies for dealing with stress and anxiety. Medications to alleviate anxiety also may be beneficial.
- **Avoid allergens.** Some reports note an association between allergies and Meniere's disease. Controlling your exposure to allergens and managing allergies with appropriate treatment may help manage Meniere's disease, as well.

Noninvasive therapies and procedures

Some people with Meniere's may benefit from other noninvasive therapies and procedures, such as:

- **Rehabilitation.** If you experience problems with your balance between episodes of vertigo, you may benefit from vestibular rehabilitation therapy. The goal of this therapy, which may include exercises and activities that you perform during therapy sessions and at home, is to help your body and brain regain the ability to process balance information correctly.
- **Hearing aid.** A hearing aid in the ear affected by Meniere's disease may improve your hearing. Your doctor can refer you to an audiologist to discuss what hearing aid options would be best for you.
- **Meniett device.** For vertigo that's hard to treat, a fairly new therapy involves the application of positive pressure to the middle ear to improve fluid exchange. A device called a Meniett pulse generator applies pulses of pressure to the ear canal through a ventilation tube. The treatment is performed at home, usually three times a day for five minutes at a time. Initial reports on the Meniett device show improvement in symptoms of vertigo, tinnitus and aural pressure. A disadvantage may be the cost of the device.

Middle ear injections

Medications injected into the middle ear, and then absorbed into the inner ear, may improve vertigo symptoms:

- **Gentamicin**, an antibiotic that's toxic to your inner ear, reduces the balancing function of your ear, and your other ear assumes responsibility for balance. The procedure, which can be performed during local anesthesia in your doctor's office, often reduces the frequency and severity of vertigo attacks. There is a risk, however, of further hearing loss.
- **Steroids**, such as dexamethasone, also may help control vertigo attacks in some people. This procedure can also be performed with local anesthesia applied by your doctor. Although dexamethasone may be slightly less effective than gentamicin, dexamethasone is less likely than gentamicin to cause further hearing loss.

Surgery

If vertigo attacks associated with Meniere's disease are severe and debilitating and other treatments don't help, surgery may be an option. Procedures may include:

- **Endolymphatic sac procedures.** The endolymphatic sac plays a role in regulating inner ear fluid levels. These surgical procedures may alleviate vertigo by decreasing fluid production or increasing fluid absorption. In endolymphatic sac decompression, a small portion of bone is removed from over the endolymphatic sac. In some cases, this procedure is coupled with the placement of a shunt, a tube that drains excess fluid from your inner ear.
- **Vestibular nerve section.** This procedure involves cutting the nerve that connects balance and movement sensors in your inner ear to the brain (vestibular nerve). This procedure usually corrects problems with vertigo while attempting to preserve hearing in the affected ear.
- **Labyrinthectomy.** With this procedure, the surgeon removes a portion or all of the inner ear, thereby removing both balance and hearing function from the affected ear. This procedure is performed only if you already have near-total or total hearing loss in your affected ear.