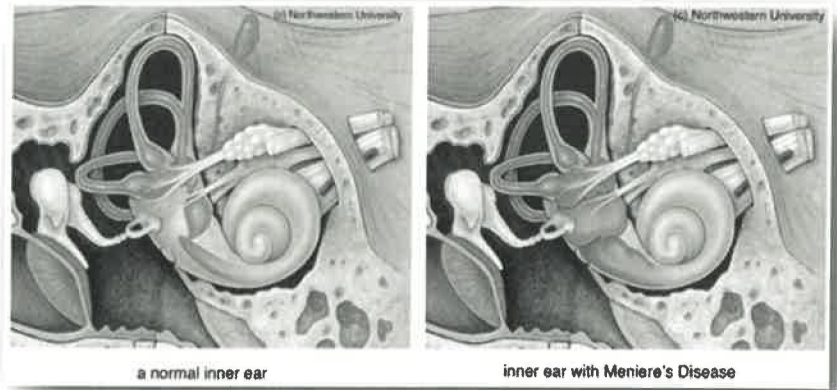


# Meniere's Disease

---

Meniere's disease is an abnormality of the inner ear causing symptoms of vertigo, tinnitus (a roaring sound in the ear), a sensation of fullness & pressure in the affected ear, and fluctuating hearing loss. It typically only affects one ear and can be a common cause of single-sided hearing loss.



## What causes Meniere's Disease?

Meniere's disease is associated with a change in fluid volume in the inner ear (labyrinth). This fluid is called endolymph. When your head moves, endolymph moves, causing nerve receptors in the inner ear to send signals to the brain about the body's motion. An increase in endolymph can cause a portion of the inner ear to swell. This is referred to as "endolymphatic hydrops". The symptoms of Meniere's disease is thought to be due to swelling that causes the membranes within the inner ear to rupture, which causes the typical symptoms. It is unclear what causes this to occur, and research continues to be performed.

## What are the symptoms of Meniere's Disease?

Meniere's typically presents with sudden, recurrent attacks of spinning

vertigo that can last several hours. The vertigo can be so severe that it causes severe nausea and vomiting. These attacks can sometimes come without warning, or sometimes patients will notice a roaring sound, loss of hearing, or a sense of pressure in the affected ear just prior to the vertigo attack. The degree of vertigo spells can vary from mild episodes that occur just a few times a year to severe spells that occur daily. Patients will often feel unsteady for several days after a severe vertigo spell.

## How is Meniere's Disease diagnosed?

Proper diagnosis of Meniere's includes a thorough evaluation by your doctor. This often requires a hearing test, and may also include balance testing and imaging studies, such as an MRI. Often the diagnosis is made on clinical grounds and patients will need to establish a pattern of repeated vertigo attacks.

## How is Meniere's Disease treated?

Although there is no cure for Meniere's disease there are various treatment options:

- ◆ **Dietary and lifestyle changes:** typically involves a strict low-salt diet and reduction in consumption of caffeine.
- ◆ **Medications:** Usage of diuretics (water pill) to reduce the fluid in the inner ear may be recommended. Your doctor may also prescribe medicines (meclizine, Ativan, or Valium) to help abort or lessen the severity an attack of vertigo once you notice that a spell may be starting or to reduce the severity of nausea
- ◆ **Transtympanic gentamicin:** Gentamicin is a commonly used antibiotic that has an effect to potentially damage the cells of the inner ear.

*(continued on back)*

## Meniere's Disease

- ◆ **Surgical procedures:** These are usually reserved as measures when the above measures have failed or in patients that have severe debilitating Meniere's attacks. Procedures include labyrinthectomy, where the inner ear is essentially removed by a surgical drill. This will lead to complete loss of hearing in the ear, and is usually reserved for patients that already have significant hearing loss in the affected ear. Hearing preservation surgeries can also be done, such as endolymphatic shunt or vestibular neurectomy. Your doctor may want you to see a sub-specialist that performs these types of operations (a neurotologist).

## Online Resources

The website [www.menieres.org](http://www.menieres.org) provides support for those affected with Meniere's and also provides links to the latest research on the disease.