

## Meniere's Disease

This is a condition of the inner ear of unknown origin but characterized by excess endolymph in the vestibular and semicircular canals, causing increased fluid pressure in the inner ear; also known as endolymphatic hydrops. Symptoms usually begin between 30 to 60 years of age. Attacks are sudden and severe and may last hours or days.



**PLAY PICMONIC** 

#### Mechanism

#### **Excess Endolymph**

#### Excess Indoor-lymph-limes

Though the cause is unknown, Ménière's disease leads to excessive endolymph accumulation in the membranous labyrinth of the inner ear. The volume of endolymph continues to increase until the membrane ruptures.

#### Signs and Symptoms

## Tinnitus

#### Tennis-ball ringing ear

Patients develop episodic tinnitus, which is described as a continuous, low-pitched humming, or ringing sound. This often immediately precedes vertigo.

#### **One-sided Sensorineural Hearing Loss**

## One-sided Sensor-nerve Headphone

As the endolymph accumulates, it applies pressure to cochlear hair cells. This repeated damage to the cochlea from increased fluid leads to one-sided sensorineural hearing loss over time.

### Vertigo

#### Vertigo-vortex

Vertigo is described as a whirling sensation, and patients can complain of dizziness. A specific complaint is a "drop attack," where they may experience the feeling of being pulled to the ground.

## Nausea and Vomiting

### Vomiting

In addition to vertigo, patients almost always develop nausea and vomiting. Sometimes, pallor and sweating can also be seen.

### Considerations

#### Meclizine (Antivert)

### Mech-lizard

In addition to bedrest, anti-vertigo medications can be used for acute Ménière's disease, like meclizine, which has the trade name Antivert. Antihistamines and benzodiazepines can also be used.

#### **Low Salt Diet**

## Low Salt-shaker

The symptoms of Ménière's disease can be responsive to a low salt diet, and patients have shown improvement with this intervention.



# Surgery

Surgeon

If relief is not achieved in these patients, surgical cutting of the nerve, or removal of the labyrinth can be done to manage Ménière's disease. This, however, leads to the loss of vestibular and cochlear hearing.