

MENIERE'S DISEASE

What is Meniere's disease?

Meniere's disease, also called idiopathic endolymphatic hydrops, is a disorder of the inner ear, although the cause is unknown, it probably results from an abnormality in the fluids of the inner ear. Meniere's disease is one of the most common causes of dizziness originating in the inner ear. In most cases, only one ear is involved, both ears may be affected in about 15% of patients. Meniere's disease typically starts between the ages of 20 and 50 years. Men and women are affected in equal numbers.

What are the symptoms?

The symptoms of Meniere's disease are episodic rotational vertigo (attacks of a spinning sensation), hearing loss, tinnitus (a roaring, buzzing or ringing sound in the ear), and a sensation of fullness in the affected ear.

Vertigo is usually the most troublesome symptom of Meniere's disease. It is defined as a sensation of movement when no movement is occurring. Vertigo is commonly produced by disorders of the inner ear, but may also occur in central nervous system disorders. The vertigo of Meniere's disease occurs in attacks of a spinning sensation and is accompanied by disequilibrium (an off balance sensation), nausea, and sometimes vomiting. The vertigo lasts for 20 minutes to two hours or longer. During attacks, patients are usually unable to perform activities normal to their work or home life.

Sleepiness may follow for several hours, and the off-balance sensation may last for days. There may be an intermitting hearing loss early in the disease, especially in the low pitches, but a fixed hearing loss involving tones of all pitches commonly develops in time. Loud sounds may be uncomfortable and appear distorted in the affected ear.

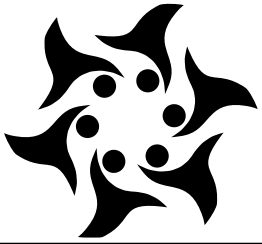
The tinnitus and fullness of the ear in Meniere's disease may come and go with changes in hearing, occur during or just before attacks, or be constant.

The symptoms of Meniere's disease may be only a minor nuisance, or can become disabling, especially if the attacks of vertigo are severe, frequent and occur without warning.

How is a diagnosis made?

The physician will take a history of the frequency, duration, severity and character of your attacks, the duration of hearing loss or whether it has been changing, and whether you have had tinnitus or fullness in either or both ears. You may be asked whether there is a history of syphilis, mumps or other serious infections in the past, inflammations of the eye, an autoimmune disorder or allergy, or ear surgery in the past.

You may be asked questions about your general health, such as whether you have diabetes, high blood pressure, high blood cholesterol, thyroid, neurologic or emotional disorders. Tests may be



ordered to look for these problems in certain cases. The physical examination of the ears and other structures of the head and neck are usually normal, except during an attack.

An audiometric examination (hearing test) typically indicates a sensory type of hearing loss in the affected ear. Speech discrimination (the patient's ability to distinguish between words like "sit" and "fit") is often diminished in the affected ear. An ENG (electronystamograph) may be performed to evaluate balance function. This is done in a darkened room. Recording electrodes are placed near the eyes. Wires from the electrodes are attached to a machine similar to a heart monitor. Warm and cool water or air is gently introduced into each ear canal. Since the eyes and ears work in a coordinated manner through the nervous system, measurement of eye movements can be used to test the balance system.

Other tests may be done. Electrocochleography (ECoG) may indicate increased inner ear fluid pressure in some cases of Meniere's disease. The auditory brain stem response (ABR), a computerized test of hearing nerves and brain pathways, computed tomography (CT) or, magnetic resonance imaging (MRI) may be needed to rule out a tumor occurring on the hearing and balance nerve. Such tumors are rare, but they can cause symptoms similar to Meniere's disease.

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