

Meniere's Syndrome

Your doctor has diagnosed you with Meniere's Syndrome. Meniere's is a disorder of the inner ear affecting balance and hearing. The inner ear has fluid-filled chambers and canals. These chambers and canals, sending information from your inner ear to your brain, help interpret your body's position and maintain your balance. Meniere's occurs when a part of this system, called the endolymphatic sac, becomes swollen. This sac helps filter and remove fluid in the semicircular canals. An attack of Meniere's usually appears without warning and the severity of each episode varies. It generally affects only one ear, but may affect both in at least 20% of those affected.

Symptoms

The symptoms of Meniere's include recurrent vertigo (spinning sensation) spells lasting 20 minutes to several hours, hearing loss, low-pitched tinnitus and a sense of fullness or pressure in the involved ear. Symptoms are generally worse with head movements. The hearing loss is in the low frequency region. In the early disease process the hearing may recover between attacks but eventually will lead to some degree of permanent hearing loss. The tinnitus usually sounds like a low-pitched roar.

Diagnosis

The eyes, ears, and brainstem work closely together to maintain balance. Head movement or other stimulation of the inner ear sends signals to the muscles of the eyes via the nervous system; this is called the vestibulo-ocular reflex, or VOR. Our ability to diagnose Meniere's is enhanced by you wearing video goggles fitted with infrared cameras so that your eye movements may be more easily visualized and recorded. Several tests are used to evaluate the function of the inner ear. The Videonystagmogram (VNG) is a series of tests that look for signs of vestibular dysfunction or neurological problems by measuring nystagmus (an involuntary movement of the eyes). Additional testing includes Rotary Chair in which the eyes movements are evaluated while sitting in a chair that rotates at various speeds. The vestibular evoked myogenic potential (VEMP) provides information about the lower portion of the vestibular (balance) nerve, which is not covered by the VNG and rotary chair. These tests provide information about how well the balance system is functioning. An audiogram (hearing test) provides valuable information regarding your hearing abilities at various frequencies, the lower frequencies being most commonly affected in Meniere's.

Treatment

There is no known cure for Meniere's disease. Some lifestyle changes and medications can generally relieve symptoms. Reducing salt (sodium) in the diet and the use of water-pills (diuretics) may relieve vertigo symptoms. Other factors that may influence Meniere's attacks and should be avoided if possible include alcohol use, fatigue, smoking and stress. If symptoms are not adequately controlled by reduced salt intake and/or diuretic medication, there are several surgical procedures that may be effective in controlling symptoms. The latest advances in surgical procedures include minimally invasive surgical techniques, including the injection of steroids or gentamicin (an antibiotic which is toxic to the inner ear) across the ear drum.