

Vestibular Neuritis and Labyrinthitis are often attributed to a viral infection affecting the vestibular (balance) nerve, as many affected with these conditions report a preceding illness. The vestibular nerve carries information from the inner ear to the brain about head movement and when one of the two vestibular nerves are affected, this creates an imbalance, and vertigo (false sense of motion or “spinning” sensation) occurs. If hearing loss occurs along with vertigo, we use the term Labyrinthitis.

Symptoms

Vestibular neuritis and labyrinthitis (vestibular neuritis with hearing loss) usually cause the sudden onset of vertigo, disequilibrium or imbalance, and nausea or vomiting. Initially, dizziness or vertigo is constant and may last a few hours to a few days. After several days, vertigo will disappear, but dizziness remains. After weeks to months, dizziness is only noted with certain activities, such as turning the head.

Diagnosis

The ears, brain and eyes 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 brain. Our ability to diagnose Vestibular Neuritis/Labyrinthitis is enhanced by infrared video goggles that easily visualize and record eye movements. The Videonystagmogram (VNG) is a series of tests that look for signs of vestibular system dysfunction 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 evaluated by the VNG and rotary chair. With vestibular neuritis, we will be able to see what is called a right- or left-beating nystagmus with a caloric (air blown in the ears) weakness, a VOR asymmetry on Rotary Chair and an abnormal VEMP if the inferior portion of the vestibular nerve is involved. An audiogram (hearing test) will tell us if you have suffered from vestibular neuritis or labyrinthitis.

Treatment

Acutely, vestibular neuritis or labyrinthitis is usually treated with vestibular suppressant medications, such as Antivert (meclizine), Ativan (lorazepam), Phenergan (promethazine), Compazine (prochlorperazine), or Valium (diazepam), in addition to prednisone. The vestibular suppressant medications are not meant to be a long-term solution to controlling the dizziness and should only be used for 3-7 days. Long-term, such medications will inhibit recovery. Recovery from vestibular neuritis/labyrinthitis occurs by the brain adapting to the vestibular imbalance in a process known as central (brain) compensation. Some will recover on their own over time, but for the majority of those affected, Vestibular Rehabilitation Therapy (VRT) is necessary. VRT is a specialized form of physical therapy that helps dizziness and balance disorders. In the hands of a physical therapist (PT) with specialized training in this area, it is highly effective in alleviating any remaining dizzy symptoms from vestibular neuritis/labyrinthitis.