What is Bilateral Vestibular Loss (BVL) or Hypofunction (BVH)?

A person can lose function of both sides of the balance part of the inner ear (vestibular system), known as bilateral vestibular loss (BVL) with total loss of function, or hypofunction (BVH), with partial loss. Causes of BVL/H include the use of certain medications that are toxic to the inner ear, bilateral Meniere’s disease, otosclerosis, Paget’s disease, meningitis, congenital abnormalities, bilateral acoustic neuroma, syphilis or autoimmune inner ear disease. Symptoms of bilateral loss include loss of balance, difficulty walking, unsteadiness in the dark or with eyes closed and vision problems. People with BVL/H can fall down because of the inner ear problem. The vestibular system is made up of two inner ears that have nerve connections to the brain and the eyes. This system helps you to know where you are in space and controls eye and head coordination. The vestibular system coordinates with vision and the sensations of your feet on the floor to keep you balanced. If both inner ears are damaged, as determined through special vestibular testing, the brain has less sensory information available to help with controlling movement. Without any information from the inner ears, the brain becomes dependent on sensation from other sources, such as your eyes and your feet on the floor. This loss of inner ear input can cause imbalance while walking and performing everyday tasks. Because the inner ears are no longer communicating well with the brain and eyes, a sense of “jumping” or “bouncing” vision can occur. This is called oscillopsia and may feel like blurred vision or difficulty focusing, especially when moving quickly or driving.

What can be done about my symptoms related to BVL/H?

A course of vestibular rehabilitation is often recommended to improve balance, walking, and function for patients with bilateral vestibular loss/hypofunction. Physical therapy will not restore inner ear function but will help the brain to use other available information to maintain balance. Exercises will focus helping to use other senses that are important for balance such as the sensation from your feet. Since vision can be impaired due to oscillopsia, eye/head coordination exercises are used to improve visual clarity while the head is moving.