Bilateral Vestibular Loss

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Fact Sheet

Bilateral vestibular loss (BVL) is a complete loss of the both inner ears. Partial damage to both inner ears is bilateral hypofunction (BVH). The inner ear, or vestibular system, controls balance. Both inner ears have connections to the brain and eyes. This system tells your body where you are in space. It also controls eye and head coordination. The inner ears work with your eyes and your sensation from your feet to keep you balanced.

If you have damage to your inner ears, your brain is dependent on sensations for your feet and your eyes. Loss of inner ear input can cause imbalance while walking and performing everyday tasks. If the inner ears can no longer communicate well with the brain and eyes, a sense of "jumping" or "bouncing" vision can occur. This is called oscillopsia.

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Causes include:

- Medications that damage the inner ear nerve or hair cells
- Inner ear damage that occurs at two different times in your life
- Autoimmune disease, or conditions that cause damage to the inner ear over time
- Meniere's disease that effects both right and left inner ear
- Acoustic neuromas (benign tumor on the inner ear nerve)
- Meningitis, or swelling of the protective membrane of your brain or spinal cord
- Otosclerosis (a rare condition that causes hearing loss because a small bone, the stapes, cannot move well).
- Paget's disease (a condition that causes fragile bones)
- Congenital abnormalities (defects from birth)
- Syphilis

Symptoms include:

- Imbalance. People with BVL/H are at a high risk of falls.
- Difficulty walking
- Unsteadiness in the dark or with eyes closed
- Blurred vision or difficulty focusing, especially when moving quickly or driving

How do you know if you have BVL/H?

 Inner ear or vestibular testing helps the medical team diagnosis BVL and BVH.

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

Balance therapy can help reduce fall risk, improve walking, and decrease symptoms. Physical therapy will not repair inner ear damage. Physical therapy can help the brain to use all senses to optimize balance. Also, eye exercises, or gaze stability exercises, can decrease blurring of vision during activities.

Safety Recommendations:

- Physical therapists may teach you how to use a cane or walker to decrease risk for falls
- Pay more attention to your surroundings, feel your feet on the ground, and widen your base of support
- Remove throw rugs, add night-lights, and use flashlights at night to reduce risk of fall
- Install handrails in stairwells and/or in the bathroom to decrease the risk of falling
- Do not swim alone and always use a life jacket when boating.
 You may not be able to tell which way is up when you are under water.
- Anxiety and worrying about your condition can increase symptoms

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