

Vestibular Exercises

Introduction

You have a problem with your balance or equilibrium. Do not be afraid of your dizziness. Only you can build up the tolerance in your brain to overcome your dizziness. It is like an exercise for muscle building. It requires regular, capacity-extending work to build up strength or tolerance. Keep provoking your dizziness many times each day, realizing that each purposeful, controlled episode of dizziness brings you closer to your last one. Once you have gained a measure of improvement and control in your practice sessions, seek out sports or other movement activities that have been difficult and spend increasing lengths of time on them until they no longer produce any symptoms.

How do vestibular exercises work?

The purpose of these exercises is to improve one's central or brain's compensation for injuries or abnormalities within the vestibular or balance system. The brain interprets information gained from the vestibular or balance system. When there is an injury or abnormality in any portion of this system, the brain must be retrained or taught to interpret correctly the information it receives. Vestibular exercises merely stimulate the vestibular apparatus. This stimulation produces information to be processed by the brain. The goal in repeating these exercises is for the brain to learn to tolerate and accurately interpret this type of stimulation. By doing these exercises repetitively, one can even teach the brain to adapt to an abnormal stimulus. These exercises work in much the same way as the exercises skaters or dancers do to keep from becoming dizzy when they spin around rapidly. Stated simply, one must seek out and overcome those positions or situations which cause dizziness. Avoiding them will only prolong one's convalescence.

Aims of exercises:

1. To train movement of the eyes, independent of the head.
2. To practice balancing in everyday situations with special attention to developing the use of the eyes and the muscle sense awareness.
3. To practice head movements that cause dizziness.
4. To become accustomed to moving about naturally in daylight and in the dark.
5. Generally, to encourage the re-building of confidence in making easy, relaxed, spontaneous movements.

When you begin:

During the first few times the exercise is performed, you should have another person present in case the dizziness becomes very severe.

When should you stop doing the exercise?

These exercises should be done at least three times a day for a minimum of 6 to 12 weeks or until the dizziness goes away altogether. Stopping before complete resolution of dizziness often results in a relapse in symptoms. The point at which one stops the exercises is when one has no dizziness for two consecutive weeks. The exercise may be stopped and restarted again at any time if dizziness returns.

The following exercises should be performed twice daily. The exercises are designed to challenge your balance system and often cause symptoms of dizziness. This is a normal response to these stimulating exercises. You should try to work through these symptoms if possible. If you feel you cannot, have your nurse contact an inpatient physical therapist for assistance.

Methods:

1. Work up to doing each movement 20 times.
2. All exercises are started in exaggerated slow time and gradually increase speed to a more rapid rate.
3. Be sure to continue exercises even though you become dizzy. Pause and rest only if you become nauseated or sick to your stomach. If ill, after resting, try a different exercise. If you still become sick to your stomach, postpone further work until your next session.

Head Exercises

1. Bending:

In a sitting position, bend your head down to look at the floor then up to look at the ceiling.

- Lead your head with your eyes focusing on the floor and the ceiling.
- Repeat this 10 times. Stop and wait for symptoms to resolve, about 30 seconds.
- Repeat entire process 2 more times.

2. Turning (side to side):

In a sitting position, turn your head to the right and then left, leading your head with your eyes as if you are watching a tennis match.

- Turn your head at a speed brisk enough to generate symptoms but not so fast that you strain your neck. (Slowly first, then quickly.)
- Go back and forth 10 times, and then wait for 30 seconds (or until symptoms resolve).
- Repeat entire process 2 more times.

As the dizziness improves:

- Perform head exercises with eyes closed.
- Progress to standing while performing head exercises.

The closer together you put your feet, the more challenging it becomes.

Sitting

1. Shrug shoulders – 20 times.
2. Turn shoulders to right and then to left – 20 times.
3. Rotate head, shoulders and trunk – 20 times each:
 - a. Rotate upper body right to left with eyes open, then repeat with eyes closed.
 - b. Rotate upper body left to right with eyes open, then repeat with eyes closed.
4. Bend forward and touch ground then sit up. Keep eyes focused on wall – 20 times.
5. Bend forward and touch ground then sit up. Move eyes to floor and back – 20 times.
6. Eye movements (head is still):
 - a. Up and down (focusing on finger).
 - b. Side to side (focusing on finger).
 - c. Finger to tip of nose and out (focusing on finger).

Standing

1. Change from sitting to standing and back again

- 20 times with eyes open.

- Repeat with eyes closed.

2. Standing with one foot in front of the other

In a corner, practice standing “heel to toe” (one foot in front of the other with the heel of one foot touching the toe of the other foot) with eyes open for 30 seconds. The goal is to stand for the entire 30 seconds without touching the wall. You may make this more challenging by crossing arms across chest. If this is too hard at first, try standing “almost heel to toe” (with feet touching at big toes and ankles). Once you have mastered these with eyes open, practice with eyes closed.

3. Standing on a cushion

In a corner, stand on a couch cushion or several pillows. Try to stand still without touching the wall for 30 seconds. Practice with eyes open. When this is easy, practice with eyes closed. You may make this more challenging by placing feet closer together. Crossing arm across your chest also makes this more challenging. You should progress by performing this in the most challenging position possible.

4. Standing and throwing

- Throw a small rubber ball from hand to hand above eye level.
- Throw ball from hand to hand under one knee.

5. Stand with heels together

Look straight ahead and hold balance (attempt only with assistance).

6. Stand on one foot

Perform first with eyes open then with eyes closed (attempt only with assistance).

7. Miscellaneous

Do activities involving stooping, stretching, bending, going up and down stairs (attempt only with assistance).

Walking

1. Walking in a straight line

In a hallway or next to a wall, practice walking in a straight line for 5 minutes with one foot in front of the other or “heel to toe” (with the heel of one foot touching the toe of the other foot). If this is too hard at first, practice walking “almost heel to toe” and gradually work to heel to toe touching.

2. Walking combined with head turning

In a hallway or open space, practice walking in a straight line while turning head and eyes left and right with every other step (i.e. when you step with your left you look left, when you step with your right you look right). Continue for the length of the hallway or about 20 feet. Repeat the process 3 times. Now repeat the entire process 3 more times but this time looking at the ceiling or floor. You will need to rest between repetitions and let symptoms calm.

3. Walk across the room

Perform first with eyes open, then with eyes closed (attempt only with assistance).

Lying Down

Sitting on side of bed, quickly lie down to your left side swinging your feet onto the bed as you do.

- Lie there for 30 seconds or until symptoms resolve.

- Repeat 3 times.
- Now repeat 3 times to the right.

Eye Exercises – Gaze Stabilization Tips

Target must remain in focus, not blurry and appear stationary while head is in motion.

Perform exercise with small head movement (45 degrees on either side).

Speed of head motion should be increased as long as target remains in focus.

If you wear glasses, wear them while performing exercises.

These exercises may provoke dizziness or nausea. Try to work through these symptoms.

Rest between each exercise.

Exercises demand full concentration. Avoid distractions.

For safety, standing exercises should be performed next to a counter or next to someone.

- **Gaze Stabilization**

Keep eyes fixed on a single stationary target held in hand or placed on a wall 3-10 feet away. Now move head side to side for 30 seconds. Repeat 3 times. Now repeat 3 times while moving head up and down for 30 seconds. Do 3 sessions per day. You may progress this by beginning in a sitting position then move to standing with feet apart, standing with feet together, standing heel to toe, marching in place, or standing on form. This will also be more difficult if object you are focusing on is placed on a “busy wallpaper” or a checkerboard.

- **Smooth pursuit**

Holding a single target, keep eyes fixed on the target. Slowly move it side to side for 30 seconds while head stays still. Perform in the sitting position. Progress to the standing position as tolerated. Now repeat moving head up and down. Repeat 20 times in each direction per session. Do 3 sessions per day.

- **Head and eyes same direction**

Holding a single target (playing card or pencil) keep eyes fixed on target. Slowly move target, head, and eyes in same direction (up and down, side to side) for 30 seconds. Perform in sitting position, you can progress this to standing as you improve. Repeat 3 times per session. This will be more difficult if you have a “background” of a busy wallpaper. Do 3 sessions per day.

- **Head and eyes opposite direction**

Holding your target, keep your eyes focused on it and begin to slowly move target (up and down, side to side) while moving your head in the opposite direction of the target for 30 seconds. Repeat 3 times per session. You may progress from sitting to standing as in above exercise. Do 3 sessions per day.

- Continue to perform these exercises at least twice daily until your symptoms resolve. If these exercises do not produce symptoms, you do not need to continue them.
- Begin a walking program at home. You should walk 5 days a week. Start by walking for 5 minutes. Increase the length of walking time by 5 minutes each week until you can walk for 30 minutes continuously.

For Questions or Emergency Care:

Call the office at **601-984-5160**. You may need to speak with the doctor on-call.