MAPLE CITY PHYSICAL THERAPY

Balance System

Summary

1. Visual
2. Somatosensory
3. Vestibular system

Visual System

The visual system relays information received by the eyes to the brain. The visual system is able to locate and interpret distance from objects to avoid walking into them. Disorders that could affect our visual system include, but are not limited to:

- Poor eyesight
- Glaucoma
- Cataracts
- Macular degeneration
- Diabetic retinopathy

It is important to stay up to date on vision checks with your eye doctor yearly.

Somatosensory System

The somatosensory systems relays information received by the joints and body to the brain to help with spatial information. This system helps the body to move in an orderly way without running into objects. The system helps to place the foot where it needs to go with ambulation with the proper amount of force. The body also has ankle and hip strategies to help the body to maintain balance when outside forces act on the body. Disorders that could affect the somatosensory system include, but are not limited to:

- Spinal cord injury
- Diabetic neuropathy
- Nerve damage
- Paresthesias
- Neurological diseases (MS, Parkinson's disease, previous stroke)

If there are any symptoms of decreased sensation in your limbs, it is important to seek treatment from a professional.

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Vestibular System

The vestibular system is a complex system that contributes to balance. It is located in the inner ear and brain which helps to interpret motion. It functions to allow the body to comprehend motion, spatial awareness, and equilibrium. The anatomy includes the saccule, utricle, and semicircular canals. These structures interpret gravity, linear and rotational movement. Disorders that can affect the vestibular system include but are not limited to:

- Benign Paroxysmal Positional Vertigo (BPPV)
- Vestibular hypofunction
- Vestibular neuritis
- Labrynthitis
- Concussion
- Meniere's disease
- Cervicogenic Dizziness
- Migraine associated dizziness
- Persistent postural perceptual dizziness

If any symptoms of dizziness are present, vestibular rehabilitation may be an option. A physician should be contacted to determine if vestibular deficits are present.

If any balance issues are present, physical therapy is an option. Physical therapy can help provide exercises and plan to strengthen the somatosensory and vestibular systems. Therapists can also provide advice and information to help with certain aspects of the visual system to avoid falls. An eye doctor should be consulted if any changes in vision are experienced.