

A look at your Neck (Cervical spine)

The cervical spine is comprised of 7 bones (C1- C7 vertebrae) that are separated by intervertebral discs (cartilage with a gel like center). The discs act as a "shock absorber" and allow the spine to move freely during activity.

- The most mobile region of your spine.
- Supports the weight of your head (approximately 10-13 pounds!)
- Houses and protects the spinal cord.
- C1 and C2 (atlas and axis) not only support your head, but provide roughly 50% of flexion, extension, and rotation of your neck.
- Each discs functions to hold the upper and lower vertebrae (bones) together and create spaces (nerve passageways called foramen)
 - Spinal nerve roots branch off of your spinal cord, in pairs, and leave the spinal column through the foramen (spaces/holes in the bone).
 - Your nerves are your communication channels from your brain to your muscles, glands, and organs.
- The cervical spine includes an intricate network of muscles, tendons, and ligaments that provide the neck with stability and movement.



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Cervical Strain

• Stretched or torn muscle, tendon, or ligament of the neck. This may occur from a sudden extreme movement of the heads position (motor vehicle accident, falls, etc)

Cervical Radiculopathy

- Damage or disturbance of the nerves function caused by a compression of the nerve root
- Symptoms:
 - o Pain
 - Numbness
 - o Muscle weakness
 - Tingling (pins and needles)
 - Lack of coordination (primarily in the hands)
- Symptoms can spread (radiate) into the neck, chest, upper back, shoulder, or arms/hands.

Treatment

- Once diagnosed by your doctor, they will discuss possible treatment plans.
 - o Rest
 - anti-inflammatory medication (corticosteroids or non-steroidal anti-inflammatory medicines)
 - o Steroid injection
 - Surgical intervention (if severe)
 - Physical Therapy

Physical Therapy

The PT will perform an initial evaluation to test your range of motion, strength, and pain level. The physical therapist will develop a plan of care and establish goals to assist you in:

- Improving range of motion and flexibility
- Mobilization
- Manual therapy (soft tissue massage)
- Increasing strength
- Decreasing pain through modalities
- Learning proper body mechanics and posture to prevent further injury.