



HEALTH

THE UNIVERSITY OF TOLEDO

Mina Tanios, M.D.

Assistant Professor of Spine Surgery
Department of Orthopaedic Surgery
419-383-3761

Cervical myelopathy occurs when the spinal cord is compressed. Spinal cord compression can cause neurologic symptoms—such as pain, numbness, or difficulty walking. Your spinal cord is the conduit that enables communication between your brain and body. The spinal cord begins at the base of the brain and ends at the first lumbar vertebra (L1). Below L1, the spinal cord becomes the cauda equina; a bundle of lumbar and sacral nerves.

The clinical presentation of myelopathy can be quite varied but usually involves some combination of difficulties with gait and fine motor coordination, weakness, and numbness. Generally, pain is not the presenting symptom. Cervical myelopathy may manifest with subtle to severe neurological deficits. Cervical myelopathy commonly has a stepwise progressive nature.

About Myelopathy

- More common in adults age 50 and older
- Most often affects the cervical spine (neck)
- Less common in the thoracic spine (mid back)
- Sometimes affects the low back (e.g., severe lumbar spinal stenosis)
- Usually a gradual and progressive disorder
- Can develop quickly (e.g., trauma, injury)

Below is a lateral MRI of a patient's cervical spine. The red arrow points to areas where the spinal cord is compressed—cervical myelopathy.



Lateral MRI of a patient's cervical spine.

Symptoms

Some of the symptoms of a myelopathy mimic other spinal problems. Symptoms that may be associated with cervical myelopathy include:

- Neck pain and stiffness
- Tingling
- Numbness
- Weakness
- Find yourself dropping things
- Hand clumsiness (e.g., buttoning a shirt)
- Balance problems
- Difficulty walking

Possible Causes

There are many different causes of myelopathy; several are listed below.

- Cervical kyphosis
- Cyst or tumor
- Degenerative spondylosis (spinal arthritis)
- Epidural abscess, infection
- Herniated disc
- Inflammatory diseases (e.g., Rheumatoid Arthritis)
- Osteophytes (bone spurs)
- Spinal Stenosis
- Spondylolisthesis
- Vertebral body abnormality

Pressure on the spinal cord generally does not resolve on its own and requires surgical treatment. Any small trauma such as a fall can lead to permanent spinal cord injury. Any sporting activities or other strenuous activities are not recommended given that the spinal cord is at risk of injury.

The goals of spine surgery to treat myelopathy are: (1) remove pressure from the spinal cord, (2) prevent symptoms from becoming worse, and (3) improve your condition.

The type of surgery that may be recommended is called spinal decompression, which means removing (or reducing) pressure from the spinal cord. Depending on the cause of the myelopathy, surgery may involve removing a herniated disc or bone spurs (osteophytes) to decompress the cord. Spine surgery to treat myelopathy may include other procedures, such as laminectomy and fusion. It may be necessary to implant instrumentation (e.g., plate, screws, rods) to stabilize the spine.

Read more about myelopathy at spine-health.com or spineuniverse.com