

Definition of cervical myelopathy:

Cervical myelopathy is a potentially disabling condition associated with spinal cord dysfunction. It frequently occurs in the elderly and accounts for the majority of non-traumatic spastic paraparesis and quadriparesis. Cervical myelopathy refers to the clinical syndrome of long-tract aberrations in the upper and lower extremities arising from cervical spinal cord compression. It is most commonly caused by degenerative spondylosis leading to circumferential compression of the cervical spinal cord, often in a congenitally narrowed spinal canal.

Initial Assessment of Suspected Cervical Myelopathy

Specific historical features:

- Poor balance
- Gait dysfunction
- Neck Stiffness
- Neck Pain
- Loss of manual dexterity
- Non-specific numbness in hands and/or feet
- At end stage, urinary problems, bowel incontinence

Physical examination features:

- Lower limb spasticity
- Clonus
- Hyperreflexia
- Hoffman sign
- Babinski sign
- Impaired tandem gait
- Romberg sign

Educate

Advise against activities predisposing to falls
Warn re: symptoms to watch for

Prescribe medication for pain relief:

- Acetaminophen
- Anti-inflammatories according to the Conseil de Medicament du Quebec¹

Prescribe therapy:

Physiotherapy for:

- gait training / balance training
- strength training

Occupational Therapy for:

- Activities of Daily Living

Order investigation:** Urgency depends upon severity and progression of symptoms

- Cervical spine X-rays
- MRI
- CT-myelogram if contraindication to MRI

Follow-up visit after MRI

Purpose: Re-assess patient status

Review pain management and symptom progression:

- Exclude serious pathology (Red flags)
- Manage accordingly

MRI shows significant spinal cord compression, that is, cord effacement, or intramedullary signal change, spinal cord deformity, severe stenosis

MRI does not show spinal cord pathology

Refer to Spine Surgery

Degree of urgency depends upon progression of symptoms.

Stable, non-progressive

Slowly progressive over months

Rapidly progressive over days, red flag condition:

Immediate referral to Spine Surgeon through direct paging or Emergency.

Cervical myelopathy is not present. Consider other pathology. For example, multiple sclerosis, brain pathology, amyotrophic lateral sclerosis and manage accordingly.

References

Conseil du Medicament du Quebec,
<http://www.cdm.gouv.qc.ca/site/download.php?f=dbd1e9e8e9dc8e58cf6ccb0845527dc>