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# CERVICAL MYELORADICULOPATHY

Cervical myeloradiculopathy is the dysfunction of the cervical spinal cord (myelopathy) and nerve root (radiculopathy).

## WHAT CAUSES THE DYSFUNCTION?

**T**he dysfunction is usually due to compression of the spinal cord and nerve root. Compression can arise from facet osteophytes (overgrowth of bone), disc herniation (slip disc), ossification of posterior longitudinal ligaments (degenerative deposition of bone within ligaments). On rare occasion, the compression can be caused by tumours, infection and fractures of the vertebrae.

## WHAT ARE THE SIGNS OF SYMPTOMS OF CERVICAL MYELORADICULOPATHY?

Patients with cervical myeloradiculopathy may complain of:

- Heaviness in the legs or arms (myelopathy);
- Inability to walk for long (myelopathy);
- Difficulties in writing, buttoning or holding utensils/chopsticks (myelopathy);
- Intermittent shooting pain to the arms and legs (radiculopathy); or
- Urinary and bowel disturbance (myelopathy).

## HOW DO WE DIAGNOSE CERVICAL MYELORADICULOPATHY?

The doctor would take a thorough history and do a physical examination. Common findings during a physical examination would be:

- Hyper reflexia;
- Clonus;
- Babinski reflex positive;
- Hoffman sign positive (flicking of the middle finger causes the thumb and index finger to flex); and
- Inverse radial reflex positive (this reflex is demonstrated by tapping the brachioradialis tendon; diminished reflex is noted along with a reflex contraction of the finger flexors).

## HOW DO WE CONFIRM THE DIAGNOSIS OF CERVICAL MYELORADICULOPATHY?

The patient would be asked to do a cervical spine radiograph, and occasionally flexion and extension radiographs will be done to look for instability. Usually, a more detailed MRI scan would be done to determine the cause of the compression to the nerve root or spinal cord. An MRI would assist the surgeon in determining the best method to treat the condition.

## HOW DO WE TREAT CERVICAL MYELORADICULOPATHY?

Myelopathy is a progressive condition. Unfortunately, this condition does not improve without decompressive surgery. The surgical procedure would relieve the compression on the spinal cord, and the surgeon may stabilise the spine with implants. However, radiculopathy does respond well to physiotherapy and analgesia. There is a small number of patient that may require surgery for radiculopathy.

## WHAT ADVICE CAN I GIVE MY PATIENTS TO PREVENT NECK INJURIES?

Seven common tips to prevent neck injuries are:

- Keep finding the best pillow (if it's not comfortable it's not the best fit);
- Sleep on your back, if it's not possible, sleep on your side and ensure your head and body are in alignment;
- Keep your computer at eye level;
- Perform neck stretching exercises;
- Stop looking on your phone for long periods of time (resulting in text neck);
- Maintain a good posture; and
- Carry weight evenly. **IM**