Cervical Spondylotic Myelopathy

A less common neck conditions occurring with age is that of cervical spondylotic myelopathy. Over the course of time, normal aging effects lead to a narrowing of the spinal canal. This compression of the spinal cord causes a host of symptoms ranging from weakness to pain and numbness.

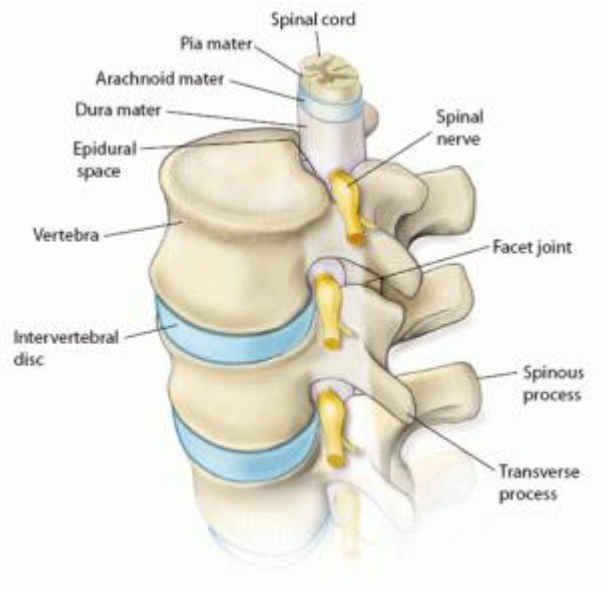
So what exactly does it all mean? Cervical means neck, and spondylosis means wear and tear / degeneration of the spine. Myelopathy refers to the spinal cord. So a literal translation could simply be spinal cord compression in the neck due to degenerative changes.

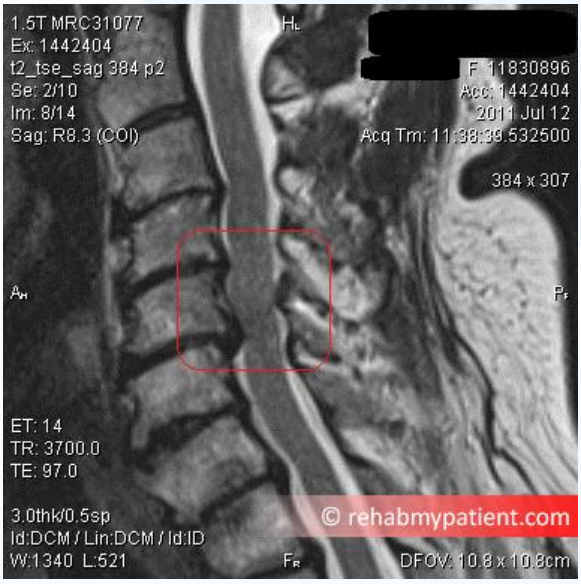
Spinal cord compression is not hugely common, but it can certainly occur. In many cases the spinal cord is very flexible, so if something compresses on to the edge of the spinal cord the cord can simple move away with virtually no mal-effect. However occasionally symptoms of nerve compression can be more severe. Most of the time, symptoms begin after 50 years of age, but they can occur earlier if an injury occurred to the spine when the individual was younger.

Many of those suffering with cervical spondylotic myelopathy will deal with a steady progression of the condition. As soon as the symptoms start, they will continue to get worse over time. Most of the time, the disease slowly progresses over the course of several years. In roughly 5 to 20 percent of individuals, cervical spondylotic myelopathy will worsen quickly.

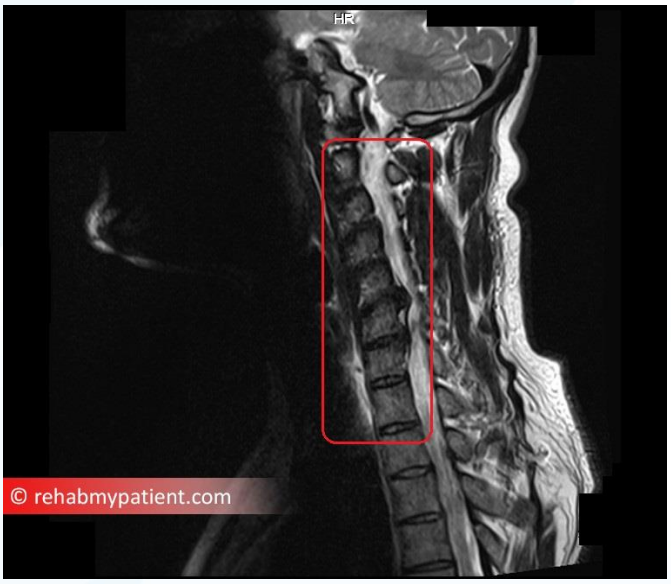
Cervical Spondylotic Myelopathy Anatomy

There are seven cervical vertebrae which are stacked on top of each other, with discs in-between. As the neck becomes degenerate, the discs tend to bulge or prolapse, and the joints become enlarged and thickened. If degenerative changes become advanced, there is a possibility that compression of the spinal cord can occur. Usually this is mild, or the edge of the spinal cord is just touched by the thickening of the joints and degenerative disc bulges.





An MRI scan showing some early/mild compression of the spinal cord



An MRI image of a patient with severe disc herniation, degenerative changes and moderate compression of the spinal cord

How to Treat Cervical Spondylotic Myelopathy:

1. **Physical Therapy**

   Physical therapy helps provide you with stretching and exercise routines to help improve flexibility and strengthen your muscles. Depending on the situation, physical therapy can include traction, which will help to alleviate pressure on the nerves. Therapy can also be useful to improve your posture…

2. **Posture**

   Many cases of spinal cord compression are caused by a postural problem known as a reduced cervical lordosis (or cervical kyphosis). This is where the bones in the neck bend forwards, disc bulges occur, and this can lead to degenerative change. The disc bulges can calcify and protrude towards the spinal cord. So it's really important to play close attention to your posture. Sports massage therapists and other therapists can help improve your posture.

3. **Anti-Inflammatory Medication**

   Muscle relaxants and anti-inflammatory medications help alleviate pain. In situations where the pain is more severe, stronger pain medications and injections might be needed. Check with your doctor first.

4. **Soft Neck Brace**

   A soft neck brace can help to reduce any sudden movements that can cause pain. By cushioning your neck, you can eliminate further problems and minimize pain. But don't use a neck brace for over two weeks, as it can lead to some weakness in your neck muscles. If you are unsure, talk to your therapist about its use and if it would be beneficial to you.

5. **MRI**

   It is likely you have already had an MRI scan and already been diagnosed with this condition, but if you have not, then an MRI of the cervical spine is a useful option for you.

6. **Surgery**

   For those who are dealing with numbness or weakness in the shoulders or arms, surgery might necessary. The surgical procedure is generally known as decompression. You should ask your therapist for a letter to a local consultant for a second opinion.

Tips:

- Too much wear and tear on the discs can lead to the development of cervical spondylotic myelopathy.
- As you age, your discs will lose some of the fluid that normally helps them to maintain flexibility.
- Herniated discs result from injuries to the spine, which can cause tiny cracks or tears in the outer layer of the disc.
- Herniated discs are a lot more common in those who smoke.
- Repetitive neck flexion / forward bending of your neck is a common way to increase disc problems in the neck. Be cautious with iPad, Laptop and iPhone use, or repetitive movements of the neck involving forwarding bending.
- Elderly individuals are more prone to wear and tear, hence more likely to develop cervical spondylosis and related conditions.