Cervical Stenosis, Myelopathy, and Radiculopathy

**Cervical myelopathy** refers to a loss of function in the upper and lower extremities secondary to compression of the spinal cord within the neck.

**Cervical radiculopathy** refers to pain and a loss of function in a specific region within the arm secondary to compression of a spinal nerve root in the neck.

**Cervical stenosis** refers to narrowing of the spinal canal, due to a variety of factors including disc degeneration, bone spur formation, and disc herniation. Cervical stenosis can lead to either myelopathy or radiculopathy, depending on the location and severity of the stenosis.

What are the Symptoms?

In **cervical myelopathy**, patients typically complain of hand clumsiness and difficulty with walking. They may drop objects more often, have difficulty buttoning shirts, and notice worsening handwriting. Gait difficulties may include unsteadiness, the need to hold onto objects to prevent falling, and increased frequency of falls.

**Cervical radiculopathy** will manifest itself as pain traveling from the neck into a specific region of either arm, forearm or hand. In many instances, this will be accompanied by numbness in a similar distribution or weakness in specific muscles in the arm, forearm or hand.

**What is the natural history of these conditions** (What could I expect if I do nothing?)

The “natural history” of **cervical radiculopathy** depends in large part on how long symptoms have been present. In patients with early symptoms, most will have resolution of their pain, numbness and weakness over a 6-12 week period. In patients who have had symptoms for longer period of time, the prognosis is less clear. Some patients in this group will eventually get complete relief with limited treatment such as activity modification, heat, ice, physical therapy or over-the-counter medications. Approximately one third of these patients will have some lingering degree of symptoms that they may be able to cope with. A small percentage will have symptoms that are unbearable and may need further, more aggressive treatment.
The natural history of cervical myelopathy is somewhat more guarded. The consensus is that patients with myelopathy will have progression of symptoms. What is not known is when the symptoms will progress, how much they will progress or how rapidly they will progress. Approximately 75% of patients will have gradual deterioration in their function with stable periods in between the episodes of deterioration. Twenty percent will have slow steady deterioration and another 5% will have rapid deterioration.