Decompressive Laminectomy is a Preferred Treatment for Cervical Myeloradiculopathy in the Elderly

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Introduction:

Cervical myeloradiculopathy is common in the elderly and its occurrence is increasing with longer population survival. The commonly accepted concept that the surgical approach is dictated by the vectors of force of the compression applies absolutely only to soft disc herniation. As we have reported in 2016, most anterior compression of the spinal cord caused by either osteophytes or OPLL even with reversal of the cervical lordosis can be successfully treated by extensive posterior decompression.
Methods:

We have reviewed a total of 140 cases with cervical myelopathy treated at our institution from 2000 to present of which 81 patients were over the age of 65. Patients who had decompressive laminectomy had very good results with improvement in the Ranawat Classification of Neurologic Deficit or Nurick Scale.
Results:

All demonstrated movement of spinal cord posteriorly away from the anterior compression on post operative MRI’s. Of the ten (10) patients treated using anterior approach, all also improved or remained stable, but they all had prolonged dysphagia which did not completely resolve in two (2) patients. Two (2) patients required PEG. Three (3) patients had persistent cough due to aspiration of the gastric content which resolved in both after two (2) years. None of these complications were present with posterior approach which also resulted in better neurosurgical outcomes.
Conclusions:

Decompressive laminectomy with lateral mass screws for multilevel spondyloptic myeloradiculopathy is an excellent choice, particularly in the elderly. It results in limited complications and significant improvement in function.
Figure 1a: Ventral and dorsal compressive forces resulting in cervical myeloradiculopathy.

Figure 1b: Resolution of compressive forces with posterior cervical decompression.