

Cervical Sagittal Malalignment And The Risk Of Increase Neck Disability In Cervical Spondylotic Myelopathy (CSM)

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CSM is the leading cause of spinal cord dysfunction. A study of the CSM nature history indicates that 20%–62% of CSM patients without surgical interventions will present neurological deterioration three to six years within follow-up. Decompression of the spinal cord, stability and restoration or preservation of lordosis appear to be important for the successful treatment of CSM. Multilevel cervical myelopathy can be treated with either anterior or posterior decompressive procedure, the choice of surgery depends on the location of pathology, alignment of the cervical spine, and also surgeon's preference.

The association between cervical alignment, sagittal balance, and myelopathy has been well characterized. Cervical spine sagittal malalignment of C2-C7 SVA correlates with worse symptoms and outcomes in patients with CSM, and should influence surgical management. Cervical sagittal alignment must be considered preoperatively when surgical strategies are being considered for CSM to prevent postoperative kyphosis and sagittal malalignment, which are now known to contribute to the progression of CSM.

Therefore, surgical management in case of multilevel and kyphotic CSM should be tailored to individual patients and decisions made at the discretion of treating surgeons with attention to cervical alignment parameter.

The author tries to show an example of surgical failure that does not accurately account for cervical alignment parameters