

Pincer cervical spondylotic myelopathy

Anterior and posterior compression of the [cervical spinal cord](#) is usually called pincer [cervical spondylotic myelopathy](#) (p-CSM), and surgery is generally recommended; however, there is some controversy about the choice of surgical approach because single anterior or posterior surgery cannot effectively relieve contralateral compression, and combined surgery may cause problems related to trauma and effects on cervical spine function.

Objective: To investigate the feasibility and indications of single anterior cervical discectomy and fusion (ACDF) for the treatment of p-CSM.

Methods: The data of twenty-one p-CSM patients who were treated with ACDF at a single center from 2019 to 2022 were collected. Neurological status was evaluated by the Japanese Orthopedic Association (JOA) scoring system. The radiological parameters included the percentage of space occupied by the spinal canal, the cervical sagittal Cobb angle, and the cross-sectional area of the spinal cord before and after the operation. Complications and spinal cord compression rates were also observed. Correlations between the decompressive effects and various prognostic factors were statistically analyzed.

Results: The mean follow-up period was 24.1 ± 3.55 months. The average JOA score significantly increased, with a mean recovery rate of $65.88 \pm 8.97\%$. The fusion rate was satisfactory. Correlation analysis revealed that the number of operation segments and age were important predictors of decompressive effects. There was no further deterioration of spinal cord function after the operation.

Conclusion: ACDF is an effective method for treating pincer spinal cord compression in terms of neurological recovery, radiological parameters, fusion rates, and complications, especially for patients younger than 60 years of age with single operative segments ¹⁾.

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Zhang X, Peng B, Ma Z, Wu B, Liu C, Li Y. Anterior cervical discectomy and fusion for the treatment of pincer cervical spondylotic myelopathy: a single-center retrospective study. *World Neurosurg*. 2024 Sep 12;S1878-8750(24)01582-1. doi: 10.1016/j.wneu.2024.09.041. Epub ahead of print. PMID: 39276970.

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