

FUNCTIONAL OUTCOME OF ANTERIOR CERVICAL DECOMPRESSION AND FUSION (ACDF) WITH STAND ALONE CAGE FIXATION IN DEGENERATIVE CERVICAL DISC DISEASE. A PROSPECTIVE OBSERVATIONAL STUDY

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ABSTRACT

INTRODUCTION: Degenerative disc disease (DDD) of the cervical spine is defined as age-related changes in the cervical spine producing either cord compressive myelopathy or nerve root compressive radiculopathy. Anterior Cervical Decompression and Fusion (ACDF) is considered as the gold standard surgical management of cervical myelopathy or radiculopathy, refractory to non – operative treatment. The requirement for a thorough decompression is mandatory for cord compression. Anterior cervical discectomy without fusion leads to empty disc space which collapses, leading to kyphosis, decreased disc height associated with increased kyphosis can lead to a loss of neural foramen height, and hence, anterior cervical discectomy with fusion (ACDF) is needed. Interbody fusion has traditionally been augmented with a plate which leads to complications. The cervical intervertebral disc replacement by a stand-alone cage provides immediate load-bearing support to the anterior column.

METHODOLOGY: A total of 14 patients were included after fulfilling inclusion criteria between January 2019 and June 2020. All patients underwent ACDF with stand-alone cage using Smith and Robinson's approach and were accessed by mJOA and NDI at 1month; 3months and 6 months follow up and were also looked for any complications during these visits.

RESULTS: The average age of the cohort was 52.43 years. Out of 14 patients, the majority were male. The most common level of disc involvement was C6-C7, followed by C5-C6. mJOA from 14.71 to 17.07 at 6 months and NDI 24.57 to 5.79 showed better functional outcomes at 1 month, 3 months, 6 months compared to preoperative scores. Cage subsidence did not correlate with functional outcome.

CONCLUSION- Anterior Cervical Decompression and fusion with a stand-alone cage is a safe alternative surgical option in single-level cervical disc disease with radiculopathy or myelopathy. It shows good functional outcomes and is not associated with significant complications.

KEYWORDS: ACDF, Radiculopathy & Myelopathy

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