

6th World Congress on Spine and Spinal Disorders

December 06-07, 2021 | Dubai, UAE

Functional recovery outcomes in Degenerative Cervical Spine Disorders after surgical intervention

Ankit Singh and Nishat Goda

K J Somaiya Medical College and Research Centre, India

Introduction: Surgical intervention is preferred in Cervical Spondylotic Myelopathy (CSM) patients with moderate functional disability. The prolonged and unpredictable course of CSM makes analysis of outcome difficult. This study ascertains neurological recovery pattern in CSM patients with radiculopathy following different approaches to cervical decompression and fusion.

Methodology: Consecutive 30 diagnosed CSM patients having functional disability underwent Spinal Decompression with/without stabilization. Based upon the direction of compression, number of spinal levels involvement and its sagittal alignment with/without spinal instability, one of three approaches were chosen—

1. Anterior Cervical Corpectomy/Discectomy and Fusion – ACCF/ACDF 19 patients with anterior compression and < 2 spinal levels. In patients with severe stenosis, retro-vertebral compression and significant kyphosis - ACCF was preferred.
2. Posterior Multilevel Laminectomy - PL 11 patients involving ≥ 3 spinal levels with neutral/lordotic cervical spine, an instrumented fusion was performed.
3. ACDF+PL VAS (Visual analogue scale), Oswestry Disability Index (ODI) and Japanese Orthopaedic Association score (JOA) were assessed to ascertain functional outcome till 1 year follow-up.

Results: With 75% patients in age group 35-60 and ACDF done in 63.3% patients, JOA score depicted neurological recovery peaking at 1 to 3 months post-operatively (16.54) and plateauing thereafter. JOAS and ODI scores for Radiculopathy were found more than myelopathy. Recovery decreases with multiple spinal levels, increasing age and symptomatic duration. VAS score improved drastically 3 months post-operatively and plateauing subsequently.

Conclusion: Recovery from neurological deficit occurs rapidly during first 3 months of surgery plateauing thereafter till 6 to 12 months of surgery setting a premise of a multidisciplinary neurological rehabilitation program starting in the early postoperative period. ODI score was comparable to JOA recovery rate. Cervical Radiculopathy alone has good recovery results after decompression surgery than myelopathy. Results ascertained in this study for CSM is excellent with best recovery in patients with moderate functional disability not amenable to conservative treatment.

Biography

Ankit Singh is a Senior Resident in Orthopaedics at a government run hospital in Mumbai, India. He has contributed to various articles published in Indian and International journals with the recent being in Global Spine Congress, AO Spine Journal. He has completed his masters in Orthopaedic Surgery from National board of Education, India in 2020 under the tutelage of Dr. Nishat Goda (Prodigy of Dr. Ram Chaddha). Having keen interest in Spine Surgery and Research, he has been actively involved in case studies and strive for the same in future.

e: ankitrobin2915@gmail.com