Letter To The Editor: Critics on postoperative functional outcomes in patients with highly migrated cervical disc prolapse

Meshaim Ehsan¹, Isma Anwar¹, Muhammad Younas¹, Aman Igbal¹

¹ Gomal Medical College, Pakistan

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The recent paper "Postoperative Functional Outcomes in Patients with Highly Migrated Cervical Disc Prolapse" (Nepal J Neuroscience, 2025;22(1):14–18) ¹ caught my attention. For addressing the surgical treatment of significantly migrating cervical disc prolapse (HMDP), a rare and technically complex clinical condition that is still underrepresented in the literature on spines, the authors merit praise.

Although the study offers insightful information on this specialized disease, a number of methodological and interpretive flaws warrant further investigation. First, the findings' generalizability is naturally constrained by the retrospective approach and small cohort size (n=12). Additionally, the strength of the authors' conclusion supporting anterior cervical corpectomy and fusion (ACCF) is limited by the lack of a comparison arm, such as individuals having posterior decompression or anterior cervical discectomy and fusion (ACDF). According to Wang et al. ², ACDF might still be a good option in some HMDP cases, especially if the herniated fragment is still partially linked to the disc space and there is not much migration.

Second, while the authors used the modified Japanese Orthopedic Association (mJOA) and Nurick scores to measure neurological recovery, the evaluation is limited to clinician-reported scales due to the lack of validated patient-reported outcome measures (PROMs), such as the SF-36 or Neck Disability Index (NDI). PROMs, which represent the patient's viewpoint on disability and recovery, are widely acknowledged as crucial elements of thorough surgical outcome evaluation³

Thirdly, it is important to interpret with caution the absence of recorded complications or adjacent segment disease

(ASD). Given that delayed adverse outcomes, including cage subsidence and ASD, are well-documented in the long-term literature after ACCF procedures, a median follow-up of 25 months would not be enough to record them ^{4 5}. Furthermore, the study does not include comprehensive radiographic follow-up with modalities such as dynamic X-rays or CT, which are essential for identifying such structural alterations.

Fourth, the lack of stratified or subgroup analysis restricts the clinical utility of the results, even though the study sample showed heterogeneity in terms of disc level, migration pattern, and baseline comorbidities. It is well established that these factors affect neurological results, intraoperative complexity, and surgical planning. This kind of segmentation is essential for creating evidence-based treatment regimens, as previous multicenter studies have shown.

Finally, although the authors mention alternative procedures such as anterior transvertebral herniotomy and posterior endoscopic discectomy in passing, these minimally invasive methods need a fairer discussion. These techniques may provide positive results with lower operative morbidity in carefully chosen patients ^{6,7}

In summary, although Periyasamy et al.1 provide positive evidence for the

application of ACCF in HMDP, the study's retrospective design, small sample size, lack of comparative analysis, and lack of PROMs weaken the impact of their findings. To elucidate the best surgical strategy in this difficult subset of cervical disc pathology, prospective, controlled studies combining PROMs, stratified analysis, and prolonged follow-up are crucial.

Keywords: Highly Migrated Disc Prolapse (HMDP), Cervical Disc Herniation, Anterior Cervical Corpectomy and Fusion (ACCF), Anterior Cervical Discectomy and Fusion (ACDF), Postoperative Outcomes, Patient-Reported Outcome Measures (PROMs), Neck disability Index.

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Address for correspondence:

Meshaim Ehsan

Gomal Medical College, Pakistan E-mail: docmeshaimehsan@gmail.com

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References

- 1. Periyasamy M, et al. Postoperative Functional Outcomes in Patients with Highly Migrated Cervical Disc Prolapse. Nepal J Neurosci. 2025;22(1):14–18.
- Wang Y, Qian Y, Wang J, Zhu M, Wang J, Teng H. Anterior discectomy could still be an alternative to corpectomy in highly migrated cervical disc herniation. Br J Neurosurg. 2017;31(6):709–13. doi:10.1080/02688697.2017.134848
- Rajshekhar V, Muliyil J. Patient-perceived outcome after central corpectomy for cervical spondylotic myelopathy: relevance of a patient satisfaction scale. Surg Neurol. 2007;68(2):185–90. PMID: 17662541
- Fengbin Y, Liu W, Li Z, et al. A new titanium mesh cage versus a traditional titanium mesh cage in anterior cervical corpectomy and fusion. Eur Spine J. 2013;22(12):2891–6. PMID: 23765361
- 5. Liu X, Wang Y, Li H, et al. Hybrid decompression and fusion for three-level cervical spondylotic myelopathy. Eur Spine J. 2017;26(1):122–30. PMID: 26846353
- Nakai S, Yoshizawa H, Kobayashi S. Anterior transvertebral herniotomy for cervical disc herniation. J Spinal Disord. 2000;13(1):16–21. PMID: 10647098
- Ishibashi K, Yanagisawa K, Tominaga R, et al. Posterior endoscopic cervical discectomy with partial pediculotomy for management of highly down-migrated cervical disc herniation: A case report. Surg Neurol Int. 2025;16:75. doi:10.25259/SNI 990 2024