O-56

Full-Endoscopic Posterior Decompression for Cervical Stenosis: A New Frontier in Minimally Invasive Spine Surgery

Raed Abohussein[1], Ahmed Ramadan Abdelfattah Saber[2]
[1]Sankt Elisabeth Hospital, Spine Surgery, Gütersloh, Germany
[2]Fayoum University Hospital, Orthopedic and Spine Surgery, Fayoum, Egypt

Title: Full-Endoscopic Posterior Decompression for Cervical Stenosis: A New Frontier in Minimally Invasive Spine Surgery

Background: Cervical stenosis can cause myelopathy and radiculopathy, typically treated with open surgeries like laminectomy or foraminotomy. These methods often involve increased risks of instability and prolonged recovery. The full-endoscopic approach minimizes muscle disruption and maintains spinal stability.

Research Question: Can full-endoscopic posterior decompression effectively treat central or lateral recess stenosis in the cervical spine, offering a less invasive alternative to open surgery?

Design: This case series explores the posterior full-endoscopic approach for central and lateral recess cervical stenosis. The study evaluates the safety, efficacy, and postoperative recovery .

Methods: Fifteen patients with cervical stenosis underwent full-endoscopic decompression via a posterior approach. Under general anesthesia, patients were positioned prone with mild cervical flexion. A 8 mm incision allowed access to stenotic regions using a dilator and working cannula. Fluoroscopy ensured precise placement. Continuous saline irrigation was used to reduce bleeding and inflammation.

Results: All patients showed significant symptom improvement, including pain relief and better mobility. The average hospital stay was shorter, and recovery was quicker compared to traditional surgery. Minimal intraoperative bleeding occurred, with no dural tears or neurological complications. One patient required revision surgery due to incomplete decompression.

Discussion: The full-endoscopic posterior approach is a promising minimally invasive method for cervical stenosis, Particularly for foraminal stenosisIt reduces muscle trauma, bleeding, and recovery time, and avoids the risk of spinal instability. This technique may be ideal for high-risk patients, such as the elderly.

Fig. 1

Fig. 2

Fig. 3

Fig. 4

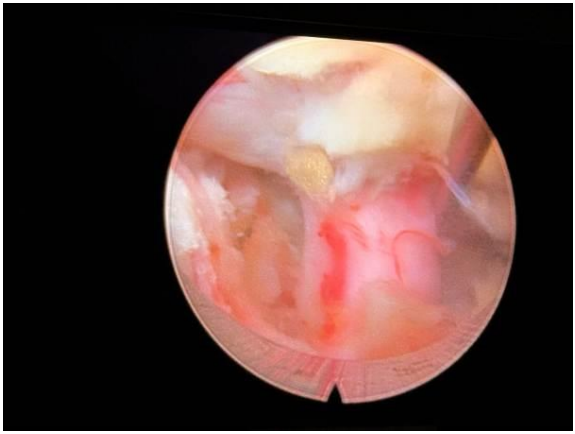

Fig. 5

Fig. 6