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Minimally invasive posterior cervical microdiscectomy is an appropriate surgical approach for patients with foraminal stenosis from herniated disc with radicular symptoms that is not responsive to conservative management. While anterior cervical discectomy and fusion (ACDF) or arthroplasty is increasingly utilized to treat herniated disc, a posterior approach eliminates the risk of potential approach related injuries to the esophagus, carotid artery, or recurrent laryngeal nerve. Additional benefits of posterior decompression include avoidance of instrumentation, which represents an increased healthcare cost, as well as potential long-term risks of adjacent-level pathologies or device failures.

A traditional open posterior cervical approach has the potential to cause significant postoperative pain due to dissection of the paraspinal musculature and the potential for disrupting the posterior tension band with inadvertent injury to the interspinous ligaments. Such disadvantages are reduced by utilizing the minimally invasive technique where a small tubular working channel is placed through a muscle splitting technique via a paramedian approach. This technique minimizes the need for muscle stripping, and thus decreases postoperative functional and structural disturbance. Discectomy in this case can also be safely performed with minimal retraction at the axilla of the nerve root. Additionally, this approach can be utilized in an ambulatory setting, which coupled with the lack of any additional instrumentation helps contribute to the overall healthcare cost savings of such a procedure.

This video describes how the minimally invasive posterior cervical discectomy can be effectively and safely performed in this illustrative case. The patient consented to the procedure and publication.

KEYWORDS: Cervical discectomy, Minimally invasive technique

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