A consecutive series of 39 microendoscopic disectomies for recurrent lumbar disc herniation

Mohamed S Kabil
Ain Shams University Hospital, Egypt

Introduction & Aim: Interlaminar microendoscopic discectomy (MED) for treatment of primary lumbar disc herniation is a fairly established technique in clinical practice. However, in recurrent cases, a concern is raised that anatomy has been distorted thus endoscopic intervention may carry greater risks of morbidity. In the present study, the authors report their seven years of experience with posterior interlaminar MED in recurrent lumbar disc herniation, highlighting the surgical technique, its outcome and feasibility.

Patients & Methods: In the period between May, 2009 and July, 2016, 39 consecutive patients with symptomatic recurrent lumbar disc herniation as confirmed by clinical examination, magnetic resonance imaging (MRI) and computed tomography (CT) scan underwent posterior interlaminar MED. Mean age was 39.7 years, range: 29-56 years. The approach was similar to a standard MED. Patients were followed-up for seven years (mean follow-up was 47.9 months, range: 3–83 months). Clinical outcomes were reviewed and evaluated in terms of pain Visual Analogue Scale (VAS) and Modified Macnab Criteria (MMC).

Results: Mean operative time was 97 minutes (range: 59–155 min.) with a mean blood loss of 57 ml and an approximate hospital stay of 22.5 hours. There were no new postoperative neurological deficits or major complications. At initial follow-up, according to MMC (three months postoperative) 67% of patients were pain free (26/39) and considered their postoperative status as excellent, 24% as good (9/39), and 8% (3/39) as fair, whereas one patient was unsatisfied. Intraoperatively, there were three cases of dural tears, mainly toward the beginning of our study, seven cases of accidental medial facetectomies due to excess bony work and two cases had an unintended fracture of the base of the spine. Postoperatively, two cases had temporary weakness of involved root that resolved on follow-up and three cases had transient postoperative neuralgia.

Conclusion: Recurrent intervertebral lumbar disc herniation can be treated adequately with posterior interlaminar MED. The technique is associated with satisfactory clinical results as well as a short length of hospitalization. We conclude that although partial loss of anatomy renders recurrent cases more difficult, with necessary experience, the technique can be safely performed and provides excellent visualization and decompression of the involved nerve root.

Biography
Mohamed S Kabil is an Assistant Professor of Department of Neurosurgery, Ain Shams University, Cairo, Egypt. He is also the Medical Director of Cairo Endospine Clinic, for Endoscopic Spine Surgery. He obtained his medical degree in 1996 from the Faculty of Medicine, Ain Shams University where he presently serves as a staff member at the Department of Neurosurgery. He also contributed to numerous publications in international medical journals, he is the First Co-Author of the international book, Endoscopic Skull Base Surgery, and gave many presentations about minimally invasive and endoscopic neurosurgery and spine surgery.

kabilms@yahoo.com