Endoscopic Lumbar Discectomy; Experience Of 89 Cases

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Introduction

- Endoscopic Lumbar discectomy is gaining an expanding popularity among neurosurgeons despite the steep learning curve it requires to be technically mastered.

- The aim of this study is to review the experience and surgical outcome of Endoscopic Lumbar discectomy performed in 89 patients regarding pain relief, integrity of neurological functions and recurrence rate.
Methods

- This study was conducted retrospectively on 89 patients who had either L4-5 or L5-S1 disc herniation and were operated upon by Endoscopic Lumbar discectomy.

- The patients were evaluated regarding pain relief, integrity of neurological functions immediately postoperatively and at follow up intervals of 1 week, 1 month, 3 months, 6 months and 1 year.
Results

- Postoperatively, 82 patients (92.13%) had complete immediate pain relief.

- Five patients (5.6%) experienced postoperative occasional mild to moderate leg pain that subsided completely over a period ranging from 1 to 3 months.

- Two patients (2.24%) continued to experience postoperative occasional mild to moderate pain over the whole follow up period.
• Pre-operatively, 15 patients (16.85%) presented with foot drop; of which 13 patients (86.6%) improved completely within a period of 1 month and 2 patients (13.3%) showed partial improvement.

• None of the patients developed new postoperative neurological deficits.

• The average operative time was 78 minutes.
• The average hospital stay was 1.5 days.
• Four patients (4.5%) developed recurrence at the 1 year interval follow up.
Discussion

Endoscopic Lumbar Discectomy can provide much shorter recovery period compared to the conventional discectomy techniques through preserving the structural & biomechanical architecture of the spine, where out of the 89 patients operated upon; 79 patients (88.76%) returned to their work with full functional activity within 2 weeks, 7 patients (7.86%) returned to their work within 4 weeks and 2 patients (2.24%) returned to their work within 6 weeks, where as one patient (1.12%) who was a heavy machinery laborer had to change his job to another one requiring much less physical exertion.
Summary

Endoscopic Lumbar discectomy, when properly mastered, can provide excellent surgical outcome to patients with herniated lumbar discs while minimally traumatizing the structural and biomechanical architecture of the spine, which markedly reduces the postoperative recovery period required for those patients to resume their regular daily life activities efficiently compared to the conventional open discectomy techniques.