

Introduction

Open lumbar microdiscectomy (OLM) has been considered the gold standards in the management of lumbar disc herniation (LDH) for their favorable outcomes in long-term follow-up. Nowadays, percutaneous endoscopic lumbar discectomy (PELD) is gaining recognition. However, greatest limitation is the lack of long-term follow-up outcomes.

Methods

Sixty two patients who underwent PELD 10 years previously were contacted for follow-up. Clinical parameters such as the visual analog scales for the back and legs (VAS-B and VAS-L, respectively) the Oswestry disability index (ODI), and radiographic findings such as the disc-height ratio and change in the difference between flexion and extension were recorded and compared to the preoperative values.

Learning Objectives

By conclusion of this session, participants should be able to identify the long-term outcomes of PELD in terms of clinical, radiographic findings and long term natural course with revision surgery rate.

Results

For 62 followed patients, 38 met our inclusion criteria (35 transforaminal, 3 interlaminar). Excluded were, 6 patients(9.4%) who underwent revision open lumbar microdiscectomy at same level and 17 patients(26.6%) who underwent lumbar spine surgery at other levels. The average follow-up period was 11.22 (± 0.83) years. For the remaining 38 patients who had no further surgery, the postoperative VAS-Back (2.53 ± 1.98), VAS-Leg (1.82 ± 1.92), and ODI (12.69 ± 11.26) were significantly different from the pre-operative values (8.45 ± 1.52 , 7.40 ± 3.04 , and 55.33 ± 24.63 , respectively; all $p = 0.01$). The average disc-height ratio was 81.54% of the original disc height. There was no evidence of instability after long-term postoperative follow-up.

Conclusions

PELD has favorable long-term outcomes.

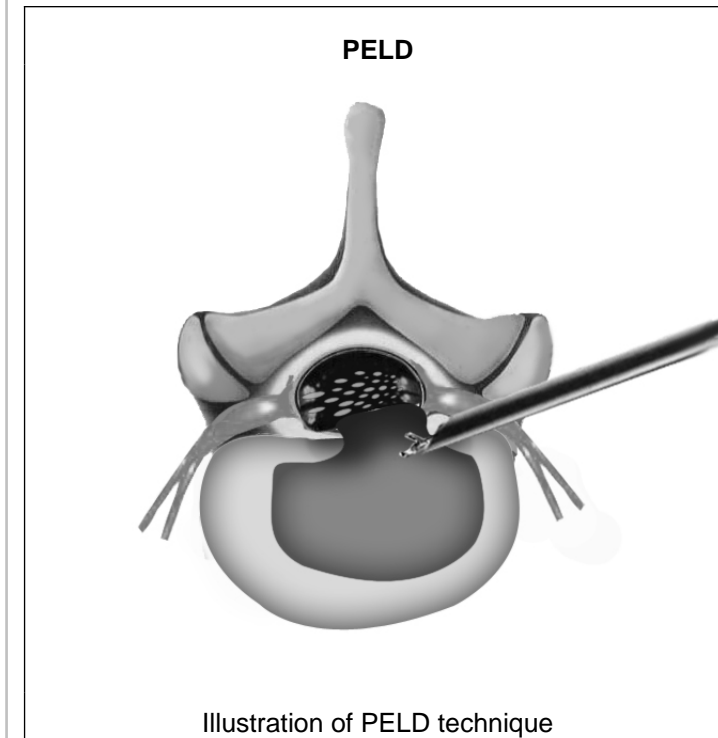


Illustration of PELD technique

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