عنوان البحث:

Mid-term evaluation of the outcome of mini-open microscopic lumbar discectomy

الملخص الانجليزى:

The advantages of microscopic discectomy include a smaller incision, less amount of blood loss, less soft tissue, and muscular damage, which may decrease operative time, wound complications, hospital stay, and post-operative recovery. However, failed back surgery syndrome (FBSS) is a clinical situation in which patients still complaining of unsatisfactory long-term clinical and functional outcomes after surgical interference of lumbosacral disease. This study aimed to evaluate the results of mini-open microscopic lumbar discectomy after five years of follow-up.

This is a prospective study conducted on 25 patients who were surgically managed with mini-open microscopic lumbar discectomy after the failure of medical and conservative treatment of their lumbar pathology. The mean follow-up duration was 5 years (range, 3.8-7 years). Patients with single-level lumbar disc prolapse or adjacent double-level lumbar disc prolapse were included in the study, while those with central canal stenosis, and/or lumbar vertebral instability that needs fixation were excluded. The postoperative outcome was evaluated using the Oswestry Low Back Pain Disability Questionnaire (ODI), at 6-month, 2-year, and 5-year follow-up visits.

The patient's age ranged from 23 to 59 years, and the duration of symptoms before surgery ranged from one to eight years. The distribution of the patients (N=25 & %) between the different grades of the ODI score was reported. The patients had shown a highly significant improvement of ODI at different follow-up visits (P-value <0.0001), regarding the overall outcome of the procedure. Two cases developed moderate complaint at a 6-month follow-up, which had been deteriorated to become severe at a 2-year follow-up. After the fusion of these two cases with the severe complaint, ODI was improved and the complaint became moderate. The rate of FBSS and re-operation in this study was 2 cases (8%), who had returned to their heavy work within 3 post-operative weeks. However, the relation between failure rate and return to activity was insignificant.

Minimally invasive microscopic lumbar discectomy is a technique that results in a satisfactory outcome and early recovery. However, segment instability and FBSS may be a sequel that needs further investigations, proper patient selection and may need future fusion.