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Unilateral Versus Bilateral Lumbar Discectomy

Thesis submitted in partial fulfillment for the medical degree (M.D.) in neurosurgery

By

BEGZE

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Abstract

Objective

Although lumbar discectomy is a commonly performed operation, different surgeons perform different techniques. This study was designed to compare between the results of unilateral and bilateral lumbar discectomy.

Methods

One hundred patients admitted at El Agouza hospital with unilateral sciatica due to a single level lumbar disc herniation were the subject of this study. Fifty patients were treated by unilateral discectomy and the other fifty patients were treated by bilateral discectomy, they were followed for a minimum of one year.

Results

Although satisfactory outcome was similar in both groups, excellent outcome with complete recovery of symptoms was found in a higher percentage in the cases treated by unilateral discectomy (38% versus 30%). Dural tears occurred in a higher percentage in cases treated by bilateral discectomy (4% versus 0%). Recurrence of disc herniation occurred in a similar rate in both groups (4.4 in unilateral discectomy and 4.6% in bilateral discectomy).

Conclusion

Complete recovery of symptoms, less operative complications, and less recurrence rate are the goals of surgery for lumbar disc herniation.

Unilateral discectomy was associated with more percentage of complete recovery, less operative complications, and similar rate of recurrence as bilateral discectomy.

Key words

Lumbar vertebrae, Degenerative disc disease, Intervertebral disc, Herniated disc, Spine biomechanics, Spinal instability, Disc recurrence.

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