Injury & Violence
Volume 4, Suppl. 1 Nov 2012
Publisher: Kermanshah University of Medical Sciences
URL: http://www.jivresearch.org
Copyright: (cc) BY

Paper No. 64

A comparison of outcomes between L3/L4 and L4/ L5 single-level laminectomy surgery

Parisa Azimi [a,*], Hasan Reza Mohammadi [a]

[a] Department of Neurosurgery, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

Abstract:

Background: Decompressive laminectomy is the most common operation performed to treat spinal stenosis. This study was performed in order to evaluate surgical outcomes between laminectomy at the L3/L4 level compared with L4/ L5.

Methods: The patients diagnosed with one level stenosis at L3/L4 or L4/ L5 who were candidate for surgery entered into this cross-sectional study. The outcome measures were the Neurogenic Claudication Outcome Score (NCOS), the Japanese Orthopaedic Association (JOA) Score, subjective walking distance, and Visual Analog Score (VAS) of leg pain/numbness. T-test tests were used to analyze the comparisons of outcomes between the L3/L4 and L4/ L5 single-level laminectomy.

Results: Ninety-four patients were eligible to enter the study during the four- year courses of study. Patients were aged 39 to 79 years (mean age 63.7 ± 9.83 years) and were followed up for at least one year. Thirty-one L3/4 and 63 L4/L5 laminectomies were performed. No significant difference was observed in the clinical indications, JOA, NCOS, duration of symptoms or VAS of leg pain/numbness between the two groups. The difference between pre and postoperative was statistically significant (P less than 0.0001).

Conclusions: The findings of this study suggest that no statistically significant difference exists between L3/L4 and L4/ L5 laminectomies in terms of preoperative and postoperative outcomes.

Keywords:

Spinal stenosis, Laminectomy, Single-level, Outcome measures

* ***Corresponding Author at:***
Parisa Azimi: *Department of Neurosurgery, Imam-Hossain Hospital, Shahid-Beheshti University of Medical Sciences, Imam-Hossain sq., Tehran, Iran.*
Email: Parisa.azimi@gmail.com, ***(Azimi P.).***