

Is Bilateral Interlaminar Canal Decompression Is An Effective Method In Management Of Lumbar Canal Stenosis? A Prospective Clinical Study

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Purpose

The aim was to observe the radiological and clinical results of bilateral interlaminar canal decompression and classic laminectomy in lumbar canal stenosis (LCS).

Materials and Methods

The data of 109 patients who were surgically treated for LCS were randomized prospectively. According to the surgical technique, the patients were divided into 2 groups. The 1st group, patients were operated upon by bilateral interlaminar canal decompression, while the other group did classic laminectomy. Low back and leg pain were evaluated by visual analogue scale (VAS) in preoperative and postoperative 1 month, 1 year, and 3 years. The two groups were compared in respect of post-operative pain, bleeding (EBL), intra- and post-operative complications.

Results

The post-operative low back pain declined compared to the preoperative pain. The post-operative VAS scores at 1 month, 1 year and 3 years were 4.10 ± 1.16 , 3.37 ± 1.55 , and 2.08 ± 0.51 , respectively in the 2nd group compared with 2.66 ± 1.01 , 1.64 ± 1.25 , and 1.27 ± 0.44 , respectively in the 1st group. The EBL average was 260 cc in the 2nd group compared to 140 cc in the 1st group. There were 9 patients of the laminectomy group developed post-operative instability requiring fusion compared to only 4 cases of the interlaminar group. Intra- and post-operative complications were higher in the 2nd group.

Conclusion

Bilateral interlaminar decompression is an effective method that provided sufficient canal decompression with decreased instability in cases of LCS, and it increases the patient comfort in the postoperative period.