

Patients with no preoperative back pain have the best outcome after lumbar disc herniation surgery

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Most patients with lumbar disc herniations requiring surgery have concomitant back pain. The purpose of the current study was to evaluate the outcome of surgery for lumbar disc herniations in patients with no preoperative back pain (NBP) compared to those reporting low back pain (LBP).

Methods

15,418 patients surgically treated due to LDH with primary discectomy from 1998 until 2020 were included in the study. Self-reported low back pain assessed with a numerical rating scale (NRS) was used to dichotomize the patients in two groups, patients without preoperative back pain (NBP, NRS=0, n=1,333, 9%) and patients with preoperative low back pain (LBP, NRS>0, n=14,085, 91%). Patient reported outcome measures (PROMs) collected preoperatively and one-year postoperatively were used to evaluate differences in outcomes between the groups.

Results

At the one-year follow-up, 89% of the patients in the NBP group were completely pain free or much better compared with 76% in the LBP group. Significant improvement regarding leg pain was seen in all measured PROMs in both groups one year after surgery. In the NBP group, 13% reported clinically significant back pain (NRS difference greater than Minimally Clinical Important Difference (MICD)) at the one-year follow-up.

Conclusions

Patients without preoperative back pain are good candidates for LDH surgery. 13% of patients without preoperative back pain develop clinically significant back pain one- year after surgery.