

Quality of Life after Using Minimally Invasive Transforaminal Lumbar Interbody Fusion (TLIF) in Selective Segment Degenerative Lumbar Scoliosis with Debilitating Back Pain

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Introduction

The key for the good quality of life post-operative is the pathological level determination for the surgery. The use of TLIF for debilitating back pain in degenerative scoliosis has been studied in a few literatures.

Methods

Sixty six patients with degenerative scoliosis, 41(62.1%) were females, 25(37.9%) were males, average age 66.4 years old.



Twenty one cases (31.8%) had BMI greater than 30 kg/m2. Forty three cases (65.2%) had lumbar scoliosis and 23 (34.8%) had thoraco-lumbar type. Thirty nine cases (59.1%) had spondylolisthesis GI, 36(54.5%) had lumbar stenosis and 5(7.6%) herniated disc.



16(24.2%) cases dextroscoliosis, and 7(10.6%) cases levodextro scolioses.



Oswestry disability index, Pain analogue scale, operative time, estimated blood loss (EBL), Cobb angle pre- and postoperative, operative complications and hospital stay (LOS) and fusion rates were analyzed.

Results

All patients underwent single level TLIF with a follow-up range from 1-6 years.. Mean operative time was 199.6 ± 36.7 minutes, mean EBL was 98.2 ml ± 45.6 ml and mean LOS was 3.6 days ± 3.1 days.

Cobb angle preoperative range was 20-50 degrees, average 28 changed post-operative to 10-45 degrees, average 20 with 28.6% improvement. VAS for pain significantly decreased from 7.2 \pm 1.5 preop to 2.2 \pm 1 at 3 months postoperative and 3.1 \pm 1.1 at one year (P<0.05). The ODI mean score was 50.2 \pm 11.2 preop decreased to 30.1 \pm 8.3 at 3 months post-op and 18.3 \pm 11.3 at one year.



Complications rate was 7.6% (n=5), fusion rate was >95% at 3 and 12 months follow- up based on dynamic plain

Conclusions

Selective MI-TLIF for selective scoliosis segment surgery with debilitating low back pain has excellent clinical outcomes and low morbidity.





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