



Re-admission, Re-operation, and Patient Reported Outcomes After Lumbar Fusion Surgery for Spondylolisthesis in 480 Patients from the QOD Registry - Supported by the NREF Regis Haid Fund

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Introduction

The American Association of Neurological Surgeons launched the National Neurosurgery Quality and Outcomes Database (QOD), a prospective longitudinal registry utilizing patient reported outcome instruments and includes data to measure the safety and quality of spinal surgery. In the present study, the authors analyzed 12-month outcomes data for patients undergoing lumbar fusion surgery for grade 1 degenerative spondylolisthesis.

Methods

The prospective QOD dataset from top enrolling sites was retrospectively queried and we found 480 patients undergoing elective spine surgery for one, two, or three level degenerative grade 1 lumbar spondylolisthesis. Baseline, 3-month, and 12-month follow-up readmission rates, re-operation rates, and patient reported outcomes (ODI and back and leg pain NRS) were collected. The absolute differences between 12-month post-operative and baseline ODI and back and leg pain NRS scores were evaluated.

Results

The 30-day readmission rate was 3.3%. The 90-day readmission rate was 4.6%. The 30-day re-operation rate was 3.1%. The baseline ODI scores differed from the 12-month scores by an absolute difference of 12.1 ± 8.8 (p<.001). The baseline back and leg-pain NRS scores differed from the 12-month scores by an absolute difference of 3.9 ± 3.1 and 4.0 ± 3.6, respectively (p<.001).

Conclusions

This registry is unique as it has patient data acquired directly from the surgeons’ office. Lumbar fusion surgery for grade 1 degenerative lumbar spondylolisthesis is associated with low 30-day re-operation rates and 30- and 90-day readmission rates. Fusion surgery was associated with significant improvements in patient-reported outcomes at one-year follow up in the N2QOD registry.

Learning Objectives

By the conclusion of this session, participants should be able to: 1) know the 30- and 90- day readmission rates for patients undergoing lumbar fusion for grade 1 spondylolisthesis, 2) understand key patient reported outcomes following lumbar fusion for grade 1 spondylolisthesis including ODI and NRS scores.

References