

Learning Objectives

By the conclusion of this session, participants should be able to: 1) Understand that lumbar decompression is an effective treatment for lumbar spinal stenosis 2) Understand that lumbar decompression for the treatment of lumbar spinal stenosis resolves axial radiculopathy

Introduction

Low back pain (LBP) is a symptom frequently associated with lumbar spinal stenosis (LSS). LBP itself has been synonymous with less treatable disease states and less favorable clinical outcomes. This is in contrast to those conditions of nerve compression resulting in primarily extremity complaints. Consequently, the treatment of the symptom of LBP is a daunting task for surgeons

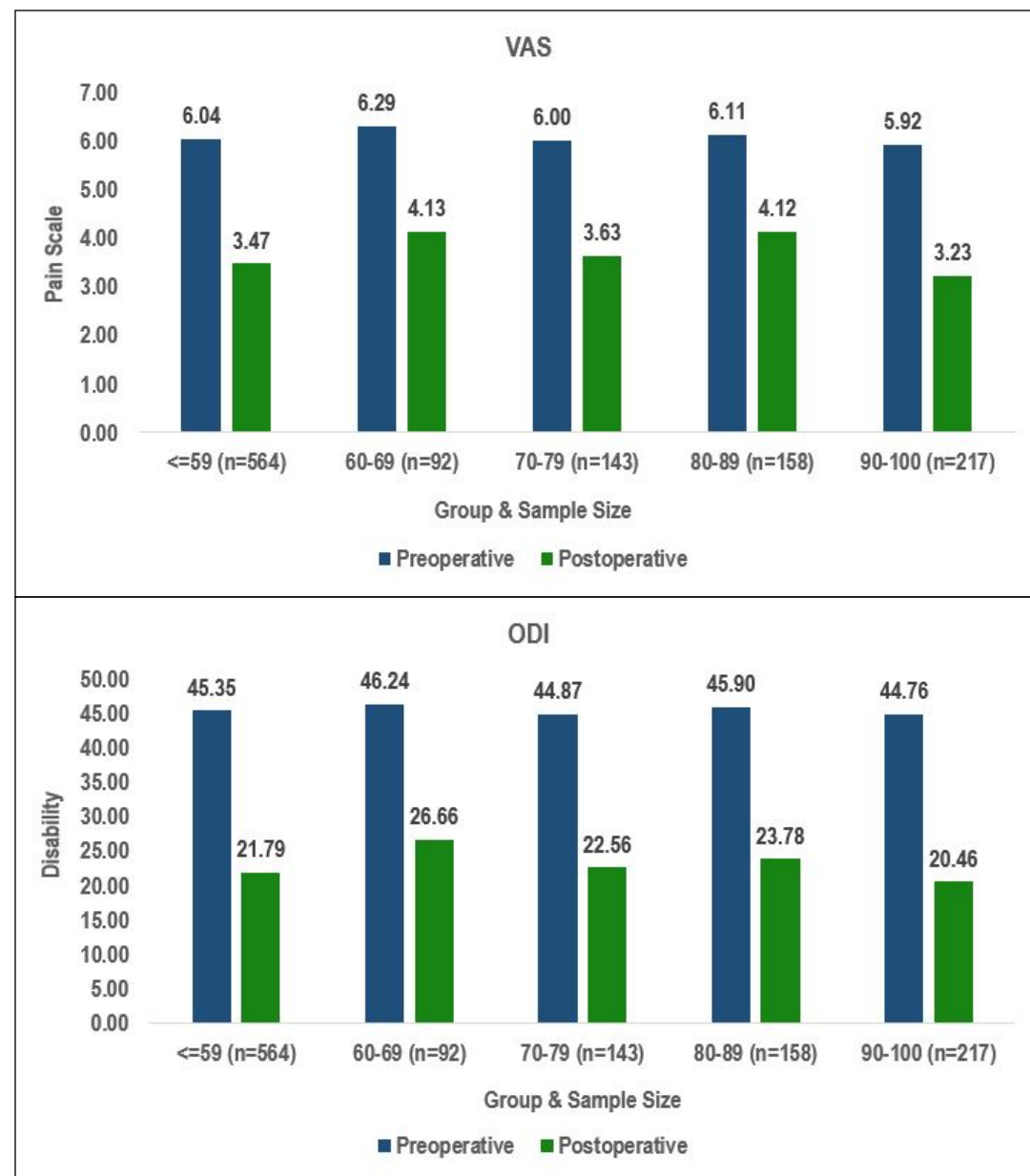
We hypothesize that LBP symptoms associated with LSS is indeed an axial manifestation of nerve compression or axial radiculopathy (AR). This study examines the response of AR to surgical decompression in patients with symptomatic LSS.

Methods

From 2012 to 2016, 1,174 patients who underwent lumbar decompression to treat LSS were evaluated at an ambulatory surgery center (ASC). Patients were placed into one of the following groups based on their preoperative axial pain percentage: ≤ 59 (n=564), 60-69 (n=92), 70-79 (n=143), 80-89 (n=158) or 90-100 (n=217). Preoperative and postoperative patient-reported outcomes surveys containing a visual analog scale (VAS) and an Oswestry Disability Index (ODI) were collected. Mean follow-up was eight months. Estimated blood loss (EBL), length of surgery (LOS) and intraoperative complications were extracted from electronic health records.

Results

Significant reductions ($p < .05$) in VAS and ODI from preoperative to postoperative were observed for the entire sample, as well as each group. Patients in the 90-100 group reported the greatest improvement in VAS and ODI from preoperative to postoperative. Mean EBL and LOS values for the entire sample were 44.7 mL and 61.3 minutes, respectively. Only five (0.43%) complications were identified.



Conclusions

Nerve compression from LSS can result in two types of pain: The traditional radiculopathy, or leg pain, and axial radiculopathy, or back pain. Our study suggests that back pain associated with AR is treatable with surgical decompression.