BACKGROUND

The ability to return to work after spine surgery, remain working long-term, and nature of that work have not been well studied in the non-work comp population. Patients undergoing decompression typically return to work earlier than after fusion, but their long-term success in the work force is unknown.

PURPOSE

We analyzed the clinical outcomes, work status, and type of work at average 4.5 years after various types of single level and multi-level spinal surgery for decompression and/or arthrodesis to define appropriate long-term expectations.

STUDY DESIGN

Retrospective review of prospectively collected data from a consecutive patient database for spine surgery

PATIENT SAMPLE

146 consecutive patients who were working before their spine surgery, age averaged 45 years (19-60 years). Excluded were patients on workers comp, revision surgery, unemployed, retired, or students.

OUTCOMES MEASURE

Visual Analog Pain Scores (VAS), Oswestry disability index (ODI), pain medication records were reviewed

METHODS

Patients underwent the following surgeries: Diskectomy-25, Laminectomy 1-2 level- 15, Laminectomy>2 levels- 6, Fusion 1-2 levels- 64, Fusion>2 levels- 36 (average 9.6 levels, range 4 – 15 levels). Clinical and radiographic data were obtained pre-op, 6 weeks, 3 months, 6 months, 1 year, 2 years, and latest follow-up. Work type was recorded for each patient undergoing surgery: sedentary(decompression-19, fusion- 51), medium(decompression-18, fusion- 43), or heavy (decompression- 9, fusion- 4).

RESULTS

At 55 months follow-up (range 24 – 106 months), complications: nonunion-1, adjacent degeneration-24, painful hardware-2, infection-2, neuro-0. Decompression patients returned to pre-op levels of work sooner than fusion patients (7 vs. 19 weeks, p=0.008). Patients working medium or heavy jobs were not more likely to remain off work than those with sedentary work. The ability to remain working long-term work was similar for decompression (41/46, 89%) and fusion (93/100, 93%). Working long-term by surgery: Primary diskectomy-23/25, Laminectomy 1-2 levels-12/15, Laminectomy>2 levels-6/6, Fusion 1-2 levels-61/64, Fusion>2 levels- 32/36. Significant improvements were seen in VAS (pre-6.0, post-2.9, P<0.001) and ODI (pre-44.7, post-25.2, P<0.001) for both decompression and fusion patients as groups, and similar results for each surgical subgroup.

CONCLUSIONS

At 55 months follow-up, both decompression (89%) and fusion patients (93%) improved ODI and VAS outcomes, had returned to work and were still working. Returning to work after fusion takes an average of 3 months longer than returning after decompression. The expectation of long-term employability after primary spinal surgery depends on the procedure performed: Diskectomy-92%, Laminectomy 1-2 levels-80%, Fusion 1-2 levels- 95%, Fusion > 2 levels-89%. When counseling patients on spinal surgery, return to work is likely.