



IMPROVEMENT OSWESTRY DISABILITY INDEX OUTCOMES FOLLOWING PATIENTS WITH DEGENERATIVE SPINE DISEASES: AN EVALUATION OF PROSPECTIVELY COLLECTED PATIENT FUNCTIONAL OUTCOMES

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INTRODUCTION

Degenerative spine disease refers to the progressive deterioration of the spine's natural structure and function over time. This degeneration can be attributed to slipped or herniated discs, spinal stenosis, and osteoarthritis. While surgery is a frequent intervention, evaluating its functional impact is crucial for comprehending the actual changes experienced by patients. The Oswestry Disability Index (ODI), a self-administered questionnaire, provides insights about pain intensity and its effect on sitting, standing, daily activities, sexuality, social engagement, and other functional aspects impacted by degenerative spine diseases.

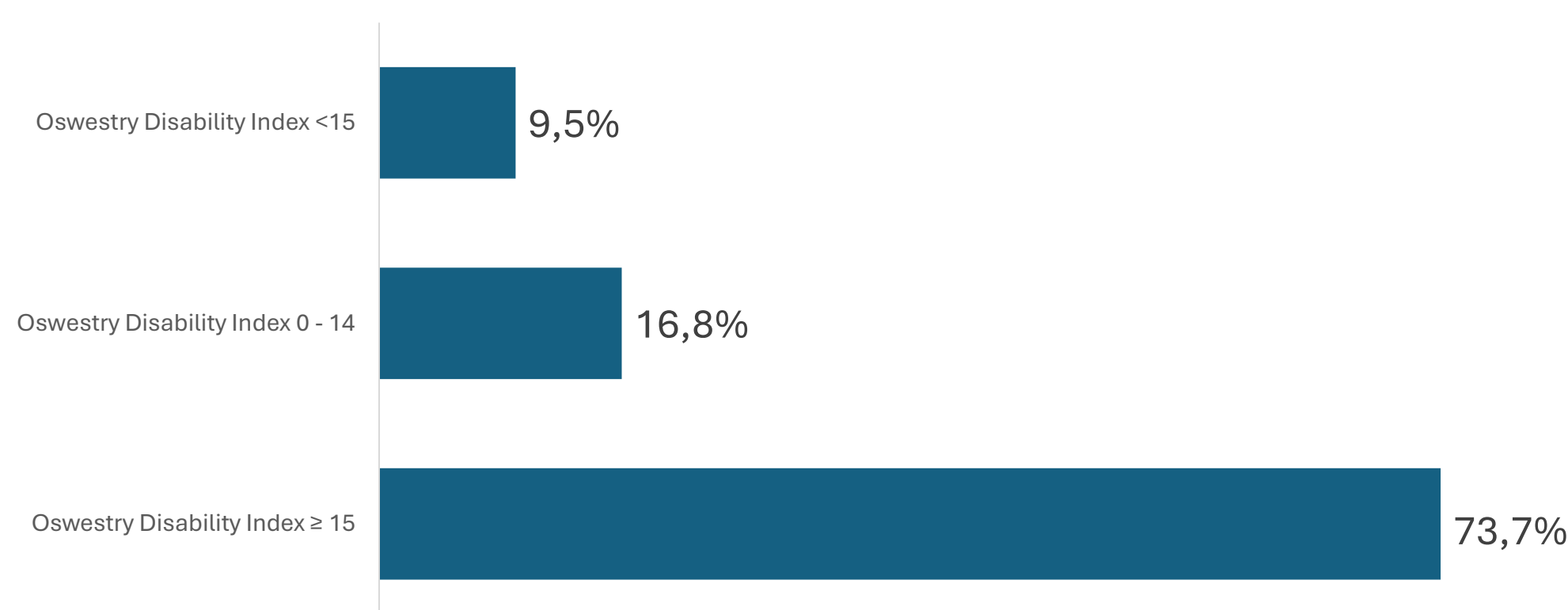
This study seeks to assess the 12-month change in the Oswestry Disability Index compared to preoperative measurements among patients diagnosed with degenerative spine diseases.

METHODS

- All patients undergoing elective surgery for degenerative spine diseases at Fundación Santa Fe de Bogotá between November 2021 and December 2023, without prior related surgery, were prospectively enrolled.
- Preoperative assessment of Oswestry Disability Index (ODI) scores occurred during hospitalization, while follow-up measurements at 12 months were conducted via telephone.

RESULTS

Figure 1. Difference between baseline and 12-month postoperative measurement of the Oswestry Disability Index in patients with degenerative spine diseases at Fundación Santa Fe de Bogotá. N:95



In our cohort of 178 eligible cases, 95 individuals (53.4%) were included in the analysis, all with complete follow-up data. At the 12-month postoperative follow-up, 73.7% (n = 70) of patients exhibited a substantial improvement of 15 points or more in their Oswestry Disability Index (ODI) scores, surpassing the minimum clinically important difference (MCID) of 11 points established in a study published in the Global Spine Journal (GSJ) (1). Our outcome also surpasses the 67.8% frequency of patients with improvement reported in the GSJ study.

Conversely, 16.8% (n = 16) experienced a change in ODI score of less than 15 or no change, while 9.5% (n = 9) reported deterioration (Figure 1).

CONCLUSIONS

This study underscores the efficacy of surgical interventions in enhancing functional outcomes for patients with degenerative spine diseases, and reinforces the genuine value of functional improvement in patient-centered care. Existing evidence emphasizes the importance of preoperative Oswestry Disability Index (ODI) scores and symptom duration as predictive factors. Unfortunately, our study did not evaluate symptom duration, a crucial aspect for interpreting results, particularly for the 9.5% of patients who experienced a deterioration in ODI scores at follow-up. Recognizing this limitation, future research should incorporate symptom duration measurement to deepen our understanding of surgical outcomes in degenerative spine disease cases and address more precisely patients' expectations of functional recovery.

1. Carreon LY, Jespersen AB, Støttrup CC, Hansen KH, Andersen MO. Is the Hospital Anxiety and Depression Scale Associated With Outcomes After Lumbar Spine Surgery? Glob Spine J. mayo de 2020;10(3):266-71.

