

COMPREHENSIVE APPROACH TO OUTCOME MEASUREMENT IN PATIENTS WITH TEMPOROMANDIBULAR DYSFUNCTION AT FUNDACIÓN SANTA FE DE BOGOTÁ.

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INTRODUCTION

Temporomandibular dysfunction is a complex and multifactorial pathology, influenced by physical and psychosocial factors that affects not only anatomical and functional aspects but also patients' emotional well-being and Quality of Life, due to the constraints imposed by constant pain. At Fundación Santa Fe de Bogotá, we've implemented an outcomes measurement program that facilitates a comprehensive assessment, from presurgery characterization to postoperative improvement. The present study describes the experience of implementing this program in patients with temporomandibular dysfunction following surgical intervention.

METHODS

The Outcomes Measurement Program for patients undergoing temporomandibular dysfunction surgery employs a strategy that encompasses assessing clinical, functional, mental, and patient-reported outcomes. **Clinical outcomes** include surgical site infection, unscheduled surgical reinterventions, and facial nerve palsy. **Functional outcomes** evaluate maximum mandibular opening. **Mental outcomes** involve anxiety and depression measured through the General Anxiety Disorder 7-item scale (GAD 7) and Patient Health Questionnaire - 9 (PHQ 9), respectively. **Patient-Reported Outcomes** Measures comprise the Graded Chronic Pain Scale and the Jaw Functional Limitation Scale (JFLS-8). All these outcomes are assessed pre-surgery, and one-month post-surgery for all patients.

RESULTS

A total of 106 patients underwent temporomandibular dysfunction surgery between October 2022 and August 2024. Results correspond to patients that completed both time measurements.

In terms of clinical outcomes, it's important to highlight no surgical site infections occurred. In functional outcomes, 34 of 61 patients showed improved mandibular opening. In mental health, anxiety risk (mild, moderate or severe) decreased from 63% to 37% among 43 patients; and depression risk decreased from 59% to 27% in 44 patients (Figure 1). These values align with the expected benchmarks for patients with the same condition (1).

Patient-Reported Outcome Measures revealed that 47% of patients exhibited low pain intensity without disability according to Graded Chronic Pain Scale at the postoperative month, compared to 22% preoperatively (Figure 2). For Jaw Functional Limitation Scale results showed 45% of patients decreased their temporomandibular function limitation.

Figure 1. Mental health outcomes, according to GAD - 7 and PHQ -9 Scales' results (Baseline and one month postoperative)

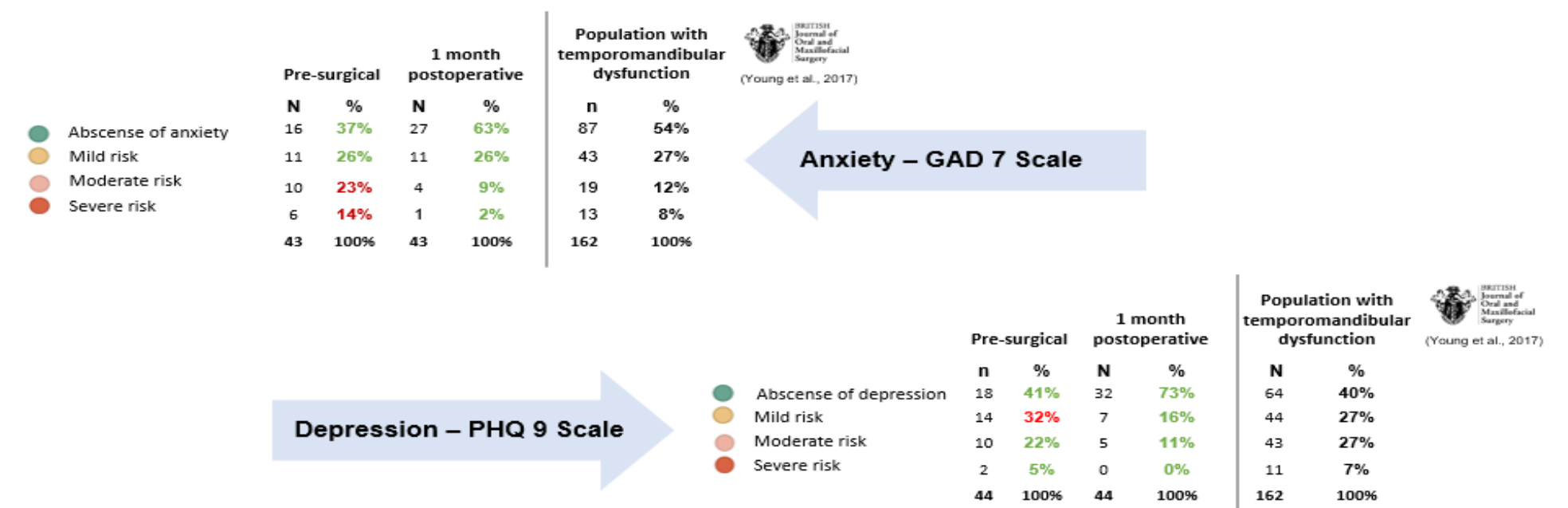
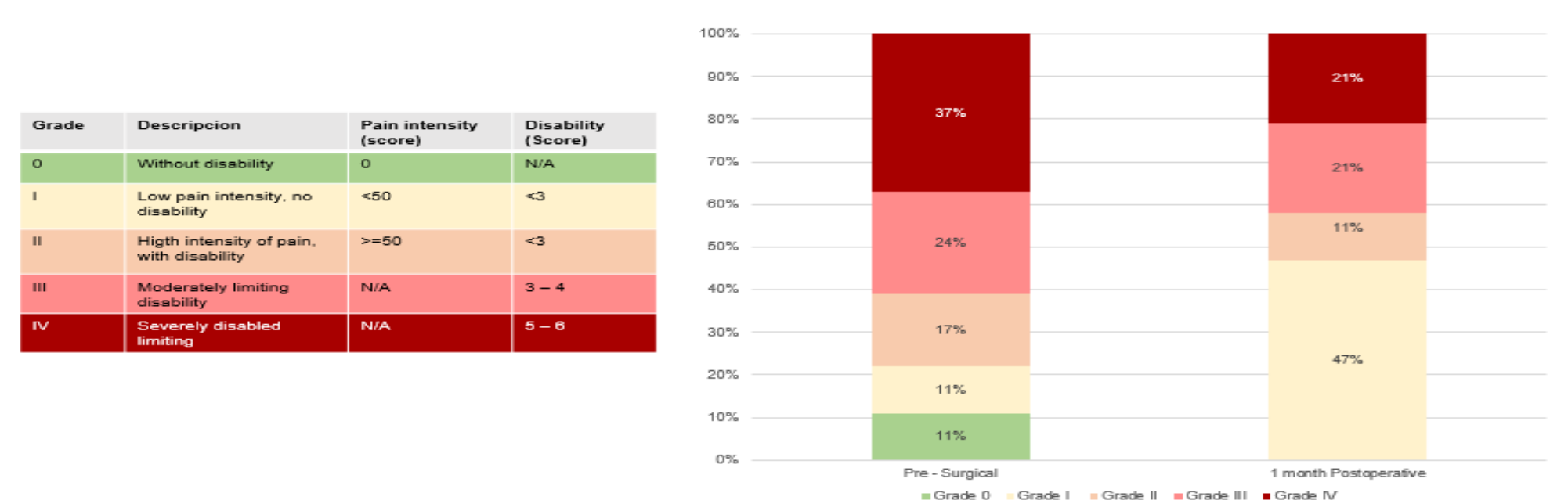


Figure 2. Distribution of patients according to their degree of disability due to pain, by the Graded Chronic Pain Scale.



CONCLUSIONS

The experience of implementing a comprehensive program to assess clinical, functional, mental, and Patient-Reported Outcome Measures (PROMs) in patients with temporomandibular dysfunction following surgical intervention has revealed a patient-centric model in alignment with our organization's superior value strategy. Findings described above show that patients with temporomandibular dysfunction can display changes not only in the clinical and functional aspects of their pathology but also in their emotional well-being and mental health risks just one month after surgery. These results are valuable and suggest a promising future for standardization, highlighting the need to observe patient outcomes over the long term of recovery process.

(1) Yeung, E., et al. (2017). Integration of mental health screening in the management of patients with temporomandibular disorders. *British Journal of Oral and Maxillofacial Surgery*, 55(6), 594-599.