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Evaluating the Impact of Laparoscopic Gastroplication on Quality of Life and Post-Operative Outcomes in Obese Patients

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Abstract
Background: Obesity has emerged as a global pandemic, manifesting as metabolic, social, and psychological disorders. Traditional bariatric approaches have long been the cornerstone of obesity treatment; however, laparoscopic greater curvature plication (LGCP) has gained recognition as a viable, minimally invasive alternative. *Aim of the study:* The aim of this study is to evaluate the impact of LGCP on weight loss, obesity-related comorbidities, and quality of life in patients with a Body Mass Index (BMI) ≥35 kg/m².
Materials and Methods: A retrospective analysis was conducted on 50 patients (45 women and 5 men) who underwent LGCP. The average preoperative BMI was 38.71 kg/m². Inclusion criteria targeted patients with a BMI ≥35 kg/m² with obesity-related comorbidities or ≥40 kg/m² regardless of comorbidity status. Preoperative and postoperative data collection included BMI measurements, comorbidity status, and quality of life, assessed through the Bariatric Analysis and Reporting Outcome System (BAROS) questionnaire.
Results: At one year postoperatively, the average excess body weight loss percentage (EBWL%) reached 64.43%, peaking at 79.31% at 18 months, with stabilization at 65.13% by the two-year mark. The average BMI decreased from 38.71 kg/m² preoperatively to 30.35 kg/m² at two years postoperatively. Obesity-related comorbidities showed significant improvement: 15 out of 16 patients with dyslipidemia and 10 out of 12 with hyperglycemia experienced resolution or improvement, while all 18 patients with joint pain reported symptom relief.
Conclusions: LGCP has proven to be an effective bariatric procedure, delivering substantial weight loss and improving obesity-related conditions and QOL in patients with a BMI ≥35 kg/m². Despite these favorable outcomes, long-term success remains contingent on patient adherence to lifestyle modifications and postoperative guidelines.
Keywords: obezitate, bariatrie, gastroplicatura, QOL