

Evaluation of Quality of Life in Gastric Cancer Patients Undergoing Different Surgical Reconstruction Methods. A Comparative Study using the EORTC QLQ-STO22 Questionnaire

Cătălin Cosma^{1,2}, Vlad Olimpiu Butiurca^{1,2}, Cosmin Nicolescu^{1,2}, Paul Cristian Russu^{1,2}, Marian Botoncea^{1,2}, Călin Molnar^{1,2}

¹George Emil Palade University of Medicine, Pharmacy, Science and Technology of Targu Mures, Romania

²General Surgery I, Emergency County Hospital of Targu Mures, Romania

Abstract

Background: Gastric cancer remains a major global health burden. Beyond oncologic outcomes, health-related quality of life (HRQoL) is increasingly recognized as a critical endpoint influenced by the reconstruction method after gastrectomy.

Methods: A prospective observational study was conducted between December 2021 and December 2024 at the Emergency County Hospital of Târgu Mureș, Romania, including 150 patients undergoing curative-intent gastrectomy. Patients were divided into two groups: gastroduodenal anastomosis (Billroth I, n=72) and gastrojejunal anastomosis (Billroth II/Roux-en-Y, n = 78). HRQoL was assessed using the EORTC QLQ-STO22 preoperatively and at 3 and 6 months postoperatively. Scores were linearly transformed to a 0–100 scale. Statistical analysis was performed with EasyMedStat

Results: The mean age was 61 years, with similar baseline characteristics. Postoperative complications occurred in 32.0% of patients, mostly grade I–II. Both groups showed deterioration in dysphagia, pain, reflux, and anxiety at 3 months, followed by partial recovery at 6 months. Reflux scores were consistently higher in the gastrojejunal group at all timepoints (baseline 26.1 vs. 17.6; 3 months 36.5 vs. 24.5; 6 months 27.2 vs. 14.7; $p < 0.001$). Eating restrictions were also greater at 3 and 6 months.

Conclusions: Both reconstruction methods impair short-term HRQoL, with partial recovery by 6 months. Gastrojejunal reconstruction is associated with higher reflux and eating restrictions, whereas gastroduodenal reconstruction shows more favorable functional outcomes

Keywords: gastric cancer, gastrectomy, quality of life, EORTC QLQ-STO22, Billroth I, Billroth II, Roux-en-Y, reconstruction