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In Search of the Optimal Reconstruction Method after Total Gastrectomy. Is Roux-en-Y the Best? A Review of the Randomized Clinical Trials

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Abstract
Background: Numerous procedures for reconstruction after total gastrectomy have been proposed in order to achieve the lowest postoperative morbidity. Roux-en-Y esojejunostomy is widely accepted as a standard reconstruction technique due to its simplicity and its satisfactory nutritional outcomes. The construction of a gastric pouch and the maintenance of the duodenal transit have been proposed to ameliorate the quality of life of patients with gastric cancer. The aim of this study is to assess the quality of life of patients with different types of reconstruction after total gastrectomy.
Material and Method: A systematic literature search was performed in PubMed, Science Direct, Wiley Online, Springer Link, up to December 1, 2019. Only original articles published in English were included. Quality of life was measured using different instruments. Postoperative aspects of reflux oesophagitis, dumping syndrome, food intake and weight status were evaluated.
Results: 15 studies were included in this research. Three techniques for restoring the digestive tract continuity were compared: Roux-en-Y eso-jejunostomy, jejunal interposition and gastric pouch construction. The statistical results of the included studies were evaluated in terms of quality of life or weight status.
Conclusions: The length of the alimentary limb for prophylaxis of eso-jejunal reflux should be at least 50 cm, but not more than 60 cm for the prevention of malabsorption. The quality of life was significantly better in patients with gastric pouch. Maintaining the duodenal transit does not seem to bring any benefit in quality of life or weight status, even if this is a physiological way.
Key words: Roux-an-Y, pouch, jejunal interposition, gastrectomy quality of life