

Roux-en-Y Feeding Jejunostomy – The Preferred Surgical Option for Enteral Nutrition in Patients with Leaks or Fistula after Gastric Sleeve

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Abstract

Background: Leaks are rare complications of laparoscopic sleeve gastrectomy (LSG) but, they may cause significant and prolonged morbidity. Enteral nutrition is mandatory for the gastric leak or fistula therapy's success and the naso-jejunal tube (NJT) as well the loop feeding jejunostomy (LFJ) have some limitations and morbidities. We propose an alternative, the laparoscopic Roux-en-Y feeding jejunostomy (LRYFJ) to support the mid- and long-term nutritional need of the patients complicated with gastric leaks or fistulas.

Aim: to investigate the laparoscopic Roux-en-Y feeding jejunostomy (LRFJ) and to evaluate the surgical technique, its' efficiency and outcomes.

Methods: The surgical steps of LRFJ are described in detail and the technical challenges are commented. The IRB approval was obtained for performing the LRYFJ in patients with gastric leaks or fistulas after LSG and to run the present study. All the patients who received LRYFJ in our center since 2015 were included into a prospective study. The patient's medical characteristics, as well the procedure's technical challenges and outcomes are analyzed.

Result: Six patients (4 females, 2 males; age 37.1 ± 11.5 years) who previously underwent LSG, were referred to our unit after the initial drainage for gastric leak in other institution and, LRYFJ was performed in all. Mean operative time was 127.5 ± 61.2 minutes. Mean duration of jejunal nutrition was 183.83 ± 128.2 days. No related mortality was encountered. Laparoscopic fistulo-jejunostomy was the definitive fistula treatment in five of the patients (83.3 %) while in one patient (16.6 %) the leak was spontaneously healed.

Conclusion: Adequate nutritional support is mandatory for the gastric sleeve leak treatment. LRYFJ has many advantages over naso-jejunal tube and loop type feeding jejunostomy particularly in treatments of prolonged sleeve leaks or fistulas. Our experience demonstrates that LRYFJ can be implemented safely with the technique we described.

Key words: enteral nutrition, laparoscopic Roux-en-Y feeding jejunostomy, leaks, fistulas, sleeve gastrectomy