

RESEARCH ARTICLE

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Laparoscopic T-tube feeding jejunostomy as an adjunct to staging laparoscopy for upper gastrointestinal malignancies: the technique and review of outcomes

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Abstract

Background: In recent years, staging laparoscopy has gained acceptance as part of the assessment of resectability of upper gastrointestinal (UGI) malignancies. Not infrequently, we encounter tumours that are either locally advanced; requiring neoadjuvant therapy or occult peritoneal disease that requires palliation. In all these cases, the establishment of enteral feeding during staging laparoscopy is important for patients' nutrition. This review describes our technique of performing laparoscopic feeding jejunostomy and the clinical outcomes.

Methods: The medical records of all patients who underwent laparoscopic feeding jejunostomy following staging laparoscopy for UGI malignancies between January 2010 and July 2015 were retrospectively reviewed. The data included patient demographics, operative technique and clinical outcomes.

Results: Fifteen patients (11 males) had feeding jejunostomy done when staging laparoscopy showed unresectable UGI malignancy. Eight (53.3%) had gastric carcinoma, four (26.7%) had oesophageal carcinoma and three (20%) had cardio-oesophageal junction carcinoma. The mean age was 63.3 ± 7.3 years. Mean operative time was 66.0 ± 7.4 min. Mean postoperative stay was 5.6 ± 2.2 days. Laparoscopic feeding jejunostomy was performed without intra-operative complications. There were no major complications requiring reoperation but four patients had excoriation at the T-tube site and three patients had tube dislodgement which required bedside replacement of the feeding tube. The mean duration of feeding tube was 127.3 ± 99.6 days.

Conclusions: Laparoscopic feeding jejunostomy is an important adjunct to staging laparoscopy that can be performed safely with low morbidity. Meticulous attention to surgical techniques is the cornerstone of success.

Keywords: Laparoscopic jejunostomy, Feeding jejunostomy, Tube jejunostomy, Staging laparoscopy, Oesophagogastric cancer

Background

Staging laparoscopy has emerged as an important staging modality for upper gastrointestinal (UGI) malignancies. It is most useful in detecting and confirming nodal involvement and small liver and peritoneal metastases that can potentially alter the prognosis and treatment strategy from curative to palliative intent [1, 2]. The placement of a feeding jejunostomy tube during staging

laparoscopy is often necessary to establish enteral feeding when oral intake is not possible or a gastrointestinal obstruction is expected to occur, such as in the presence of unresectable obstructed tumour or advanced metastatic cancer. Patients with severe sarcopenia will also benefit especially if they are to undergo neoadjuvant chemotherapy for down-staging or palliative chemotherapy. The benefits of a feeding jejunostomy to enable improvement of nutrition in those requiring chemotherapy and maintenance of enteral access during the period of profound gastrointestinal toxicity while on chemotherapy cannot be underestimated.

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