Laparoscopic Intra gastric Surgery for Early Gastric Cancer and Gastrointestinal Stromal Tumors

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ABSTRACT

Background. T1a gastric cancer and gastrointestinal stromal tumors (GIST) often require extensive resection despite their favorable tumor biology. This holds especially true for lesions located at the gastroesophageal junction. In this video we will demonstrate an oncologically sound technique of laparoscopic intra gastric surgery that allows for safe and effective tumor resection.

Methods. The first patient has a T1a gastric adenocarcinoma with no adverse features at the gastroesophageal junction. The tumor is resected with multiple cuffed ports placed directly into the stomach. The specimen is removed via the mouth. The next video shows the use of multi-port access to resect a 6 cm GIST at the cardia. An endoloop is used to provide safe manipulation with minimal handling of the GIST itself. The third patient has a small 1.5 cm GIST, and a single incision access device is used for stapled removal of this tumor located at the gastroesophageal junction.

Results. The video shows safe and feasible techniques for intra gastric surgery to remove early gastric cancer and GIST. We demonstrate the use of multiple ports and single access, as well as stapling inside the stomach.

Conclusions. The technique of intra gastric laparoscopic surgery allows for safe removal of T1a gastric cancer too extensive for endoscopic resection. At this point, gastric adenocarcinomas of <4–5 cm, with no submucosal, lymphatic, or vascular invasion or ulceration and no suspicion for lymph node metastasis should undergo this treatment. Excellent visualization, the ability to perform full-thickness resection and manage perforations make this new technique an excellent treatment option for early gastric cancer and GIST.

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