

Search (((NOTES and gastrointestinal endoscopic surgery AND ("last 2 years"[EDat] AND "last 2 years"[PDat] AND (Humans[Mesh] OR Animals[Mesh:noexp]) AND (Male[MeSH Terms] OR Female[MeSH Terms]))) AND "2009/09/26 15.00"[MHDA]:"2009/10/10 15.00"[MHDA])) NOT (((NOTES[TIAB] AND gastrointestinal[TIAB] AND ("endoscopy"[TIAB] OR "endoscopy"[TIAB] OR ("endoscopic"[TIAB] AND "surgery"[TIAB]) OR "endoscopic surgery"[TIAB])) AND ("2007/10/15"[TIAB] : "2009/10/13"[TIAB] AND "2007/10/15"[TIAB] : "2009/10/13"[TIAB] AND ("humans"[TIAB]) OR ("animals"[TIAB])) AND ("male"[TIAB]) OR ("female"[TIAB]))) AND "0001"[EDAT]:"2009/09/26 15.00"[EDAT]))

1: [Surg Endosc.](#) 2009 Aug;23(8):1908-13. Epub 2009 Jan 30.



Endoscopic full-thickness resection with laparoscopic assistance as hybrid NOTES for gastric submucosal tumor.

[Abe N](#), [Takeuchi H](#), [Yanagida O](#), [Masaki T](#), [Mori T](#), [Sugiyama M](#), [Atomi Y](#).

Department of Surgery, Kyorin University School of Medicine, 6-20-2 Shinkawa, Mitaka, Tokyo, 181-8611, Japan. abenbtg@kyorin-u.ac.jp

BACKGROUND AND OBJECTIVE: Laparoscopic wedge resection using a linear stapler is widely accepted as a treatment for gastric submucosal tumor (SMT). Although this surgery is simple, it can lead to excessive normal tissue removal. To avoid the latter, we have introduced endoscopic full-thickness resection with laparoscopic assistance, known as laparoscopy-assisted endoscopic full-thickness resection (LAEFR). Herein, we present the preliminary results of LAEFR for gastric SMT patients. **METHODS:** Four patients with gastric SMT underwent LAEFR. LAEFR consists of four major procedures: (1) a circumferential incision as deep as the submucosal layer around the lesion by the endoscopic submucosal dissection technique, (2) endoscopic full-thickness (from the muscle layer to the serosal layer) incision around the three-fourths or two-thirds circumference on the above-mentioned submucosal incision under laparoscopic supervision, (3) completion of the full-thickness incision laparoscopically from inside the peritoneal cavity, and (4) handsewn closure of the gastric-wall defect. **RESULTS:** LAEFR was successfully carried out without any intraoperative or postoperative adverse events. Mean operating time and estimated blood loss were 201 min and 27 mL, respectively. Contrast roentgenography on postoperative day 3 showed neither gastric deformity nor disturbance of gastric emptying in all the patients. **CONCLUSIONS:** LAEFR may be considered one of the so-called hybrid natural orifice transluminal endoscopic surgery (NOTES) techniques because a peroral endoscope advances into the peritoneal cavity. LAEFR enabled whole-layer excision as small as possible with an adequate margin. LAEFR is a safe and minimally invasive treatment for patients with gastric SMT, and could be a more reasonable and economical alternative to other laparoscopic procedures.

PMID: 19184206 [PubMed - indexed for MEDLINE]



Related articles

- [Laparoscopic and endoscopic cooperative surgery for gastrointestinal stromal tumor dissection.](#)

Surg Endosc. 2008 Jul; 22(7):1729-35. Epub 2007 Dec 12.
[Surg Endosc. 2008]

- [Laparoscopic ultrasound-guided resection of gastric submucosal tumors.](#)

Surg Endosc. 2006 Aug; 20(8):1305-7. Epub 2006 Jul 24.
[Surg Endosc. 2006]

- [A new technique for gastric endoscopic submucosal dissection: peroral traction-assisted endoscopic submucosal dissection.](#)

Gastrointest Endosc. 2009 Jan; 69(1):29-33.
[Gastrointest Endosc. 2009]

- [\[Curative laparoscopic surgery for early gastric cancer: eight years experience\]](#)

Nippon Geka Gakkai Zasshi. 2000 Aug; 101(8):539-45.
[Nippon Geka Gakkai Zasshi. 2000]

- [Multimedia article. Laparoscopic ultralow anterior resection with colonic J-pouch-anal anastomosis.](#)

Dis Colon Rectum. 2008 Nov; 51(11):1710-1. Epub 2008 Aug 5.
[Dis Colon Rectum. 2008]

- » [See reviews...](#) | » [See all...](#)