

Answer

Slippage of Stomach Through an Adjustable Gastric Lap-Band

Laparoscopic adjustable silicone gastric banding (Lap-Band, Inamed Health, Santa Barbara, Calif.) is a relatively new type of bariatric procedure in the United States. It was approved by the Food and Drug Administration for clinical use in 2001. Before 2001, the procedure was used throughout Europe, Australia, and Latin America, and proved to be an effective and safe procedure that could help obese patients lose up to 65% of excess body weight.¹⁻⁵ The gastric band is an adjustable device that creates a small gastric pouch that promotes early satiety and slow, progressive, sustainable weight loss.

This patient suffered an anterior slippage of the stomach fundus through the Lap-Band. This was likely triggered by her paroxysmic vomiting. The stomach slipped anteriorly and laterally along an area that may not have been properly fixed during the band's initial placement.

The gastric system has some early potential complications, including perforation (<1%), obstruction from over-tightening (<1%), and slippage (<1%). Late complications are erosion (<1%), slippage (<10%), and failure to lose weight (<4%).¹⁻⁵ Anterior slippage seemed to be a more frequent problem during earlier series. Slippage can be prevented by proper lateral fixation of gastro-gastric stitches over the band. The anterior herniations are different from the posterior herniations, in which the lesser sac is entered during retrogastric dissection, rendering a space open for posterior slippage. This condition rarely occurs when the band is placed above the bursa omentalis. This band placement prevents the posterior aspect of the stomach from migrating up, and keeps the band from shifting. When slippage does occur, the band should not only be repositioned, but anterior and posterior fixation with gastro-gastric sutures should also be performed.³⁻⁵

As the number of patients who have undergone bariatric procedures increases, general practitioners and general surgeons must be familiar with the procedure's potential complications. These complications should be promptly identified, since many of them can be safely and easily corrected via laparoscopy by an experienced bariatric surgeon. It is also important to determine the need for conventional open surgery to remove the band, if needed.

Important initial steps to manage this situation include emptying fluid from the band's reservoir, bowel rest,

the use of gastric mucosa protectors (proton-pump inhibitors or histamine 2 blockers), and reintervention during the first 24 to 48 hours after identification of the problem. Chronic slippage may occur as well, and may present not only with obstructive symptoms, but also with failure to lose weight and/or the presence of reflux. These latter symptoms may prompt late slippage as a possible differential diagnosis, warranting a swallow study.

Accepted for publication April 4, 2003.

Correspondence: Jeff W. Allen, MD, Center for Advanced Surgical Technologies, Department of Surgery, University of Louisville, Louisville, KY 40292 (jeffa@iglou.com).

REFERENCES

1. Allen JW, Coleman MG, Fielding GA. Lessons learned from laparoscopic gastric banding for morbid obesity. *Am J Surg.* 2001;182:10-14.
2. O'Brien PE, Brown WA, Smith A, McMurrick PJ, Stephens M. Prospective study of a laparoscopically placed, adjustable gastric band in the treatment of morbid obesity. *Br J Surg.* 1999;86:113-118.
3. Wiesner W, Weber M, Hauser RS, Hauser M, Schoeb O. Anterior versus posterior slippage: 2 different types of eccentric pouch dilatation in patients with adjustable laparoscopic gastric banding. *Dig Surg.* 2001;18:182-186.
4. Weiner R, Wagner D, Blanco-Engert R, Bockhorn H. A new technique for laparoscopic placement of the adjustable gastric band (LAP-band) for preventing slippage. *Chirurg.* 2000;71:1243-1250.
5. Favretti F, Cadiere GB, Segato G, et al. Laparoscopic adjustable silicone gastric banding (Lap-Band): how to avoid complications. *Obes Surg.* 1997;7:352-358.

Submissions

The editor welcomes submissions to the "Image of the Month." Send submissions to Claude H. Organ, Jr, MD, Editor, *Archives of Surgery*, 1411 E 31st St, Oakland, CA 94602; phone: (510) 437-4940; fax: (510) 534-5639; e-mail: archsurg@jama-archives.org. Articles and photographs submitted will bear the contributor's name. Manuscript criteria and information are per the "Instructions for Authors" for *Archives of Surgery*. No abstract is needed, and the manuscript should be no more than 3 typewritten pages. There should be a brief introduction, 1 multiple-choice question with 4 possible answers, and the main text. No more than 2 photographs should be submitted. There is no charge for reproduction and printing of color illustrations.