Postpartum Internal Hernia

Marianna G. Mavilia, OMS II Ronald F. Sing, DO

From the Carolinas Medical

Center in Charlotte,

North Carolina.

Financial Disclosures: None reported.

Address correspondence to Ronald F. Sing, DO, Carolinas Medical Center, PO Box 32861, Charlotte, NC 28232-2861.

E-mail: rsing@carolinas.org

Submitted
July 29, 2013;
final revision received
October 31, 2013;
accepted
January 7, 2014.

32-year-old woman (gravida 2, para 2) presented with severe, midepigastric abdominal pain that began 3 hours after delivery. Her surgical history was significant for laparoscopic Roux-en-Y gastric bypass (LRYGB) 4 years earlier. An axial computed tomographic (CT) image of the abdomen depicted twisting of central mesentery and origin of the "swirl" (image A, arrow). A coronal CT image of the abdomen also depicted twisting of central mesentery and the "swirl" (image B, circle), along with small bowel dilatation. An internal hernia (IH) was discovered during laparotomy, and 110 cm of ischemic small bowel was resected and left in discontinuity. A second laparotomy performed the next day confirmed viable small bowel tissue, and the patient underwent a stapled end-to-end primary anastomosis. She recovered and was discharged home.

The risk of IH after LRYGB is well-documented.^{1,2} The swirl sign is a radiographic finding that accurately predicts the occurrence of IH with a sensitivity of 78% to 100% and a specificity of 80% to 90%³ and is characterized by a clustering of small bowel loops at the mesenteric root.¹⁻³ The "swirl sign" seen on a CT image should be considered as an IH in patients who have had LRYGB. Imaging studies should be considered early to rule out IH in this patient population. (doi:10.7556/jaoa.2014.062)

References

- Bauman RW, Pirrello JR. Internal hernia at Petersen's space after laparoscopic Roux-en-Y gastric bypass: 6.2% incidence without closure—a single surgeon series of 1047 cases. Surg Obes Relat Dis. 2009;5(5):565-570. doi:10.1016 /j.soard.2008.10.013.
- Carmody B, DeMaria EJ, Jamal M, et al. Internal hernia after laparoscopic Roux-en-Y gastric bypass. Surg Obes Relat Dis. 2005;1(6):543-548.
- Iannuccilli JD, Grand D, Murphy BL, Evanelista P, Roye GD, Mayo-Smith W. Sensitivity and specificity of eight CT signs in the preoperative diagnosis of internal mesenteric hernia following Roux-en-Y gastric bypass surgery. Clin Radiol. 2009;64(4):373-380. doi:10.1016/j.crad.2008.10.008.

© 2014 American Osteopathic Association



