

## Abstract submissions

More than 30 students, residents and fellows submitted abstracts and case studies to *Minnesota Medicine*, for possible publication.

The quality of the submissions was, overall, high, according to reviewers, and a number of them touched on issues relevant to today's health care. Twelve abstracts were published in the September/October and November/December issues of *Minnesota Medicine*. Four are in this issue.

The reviewers looked at each manuscript to determine whether the research or case description was clear and complete, whether the methodology was sound, whether the scientific literature review was sufficient and whether the findings had implications for future research. Reviewer's comments were sent to all those who submitted.

We thank our reviewers: Devon Callahan, MD; Renee Crichlow, MD; Milton Datta, MD; Ann McIntosh, MD; Zeke McKinney, MD, MHI, MPH; Abby Metzler, MD, and Siu-Hin Wan, MD. Callahan and Wan are former members of the *Minnesota Medicine* Advisory Board; McKinney is chief medical editor of *Minnesota Medicine*.

# Fossa of Landzert herniation in a young woman presenting with chronic episodic abdominal pain

BY GRACE BRAIMOH, MD, AND ROBERT MATLOCK, MD

**M**ultiple aberrations evolve during the formation of the mesentery in the stages of early development. These aberrations from gut malrotations may lead to fossa development where bowel loops herniate. We present a case of a left mesocolic paraduodenal hernia into a dorsal mesentery fossa, also called the fossa of Landzert, in a young woman who presented with long-term complaints of episodic abdominal pain, nausea, and vomiting.

### Case report

A 20-year-old female was referred to gastroenterology clinic with long-term complaints of episodic abdominal pain, nausea, and vomiting dating back many years.

She had tried numerous medications, diet changes, and bowel regimens in the past without relief. The patient had been evaluated by various health care providers with extensive work-up, including multiple imaging studies such as abdominal ultrasonography, CT scans, and esophagogastro-

duodenoscopy with biopsies, without detection of clear pathology.

On examination, her blood pressure was 160/81, pulse was 93/bpm, oxygen saturation of 100% on room air, with normal temperature and BMI of 22.9. Abdominal examination revealed mild epigastric tenderness to palpation, without distention or peritoneal signs.

Her most recent CT scan showed a cluster of bowel loops above the celiac artery, which prompted suspicion for a supramesocolic hernia without obstruction (image 1). Patient was referred to a surgeon for further evaluation and definitive diagnosis was accomplished by direct visualization using robotic-assisted diagnostic laparoscopy.

Intraoperative findings revealed herniation

of the majority of her small bowel, with the exception of about 10 cm of the terminal ileum through the paraduodenal fossa up to the transverse mesocolon into the lesser space behind the stomach. Reduction and repair of paraduodenal hernia with closure of mesenteric defect was performed successfully.

The patient was discharged on post-operative Day 2 and returned on post-operative Day 3 with nausea and vomiting. An abdominal CT showed obstruction at the level of the duodenum, which was managed conservatively with nasogastric tube placement, fluid resuscitation, and pain management. Patient was discharged four days later with complete resolution of symptoms.

### Discussion

The fossa of Landzert is located behind the ascending part of duodenum. Herniations occur when small bowel loops prolapse through the Landzert fossa. This is present in about 2% of the population. Paraduodenal hernias occur both on the right and left side, with left-sided hernias being more common.

Symptoms of episodic nausea, vomiting, and intermittent cramping in the absence of imaging findings should trigger suspicion of paraduodenal hernias.

CT has been shown to have good specificity with detection of paraduodenal hernias, but definitive diagnosis and treatment involves exploratory laparoscopy to further visualize and repair these hernias.

Timely treatment with surgical intervention is important due to risk of bowel

incarceration and death. Hence, it is important for clinicians to have a high index of suspicion for paraduodenal hernias with patients presenting with nonspecific radiologic findings and clinical symptoms. **MM**

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