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LETTER TO EDITOR

Afferent loop syndrome of 10 years' onset after gastrectomy

KEYWORDS
Abdominal pain;
Afferent loop syndrome;
Gastrectomy;
Tomography;
X-ray computed;
Ultrasonography

To the Editor,

We read with interest the article by Nagahisa et al.[1] An increasing number of new techniques for gastrectomy are available and associated with few significant complications. Afferent loop syndrome is a rare complication occurring after Billroth-II or Roux-en-Y reconstruction distal gastrectomy. It usually occurs within 2 weeks after the surgery.[2] We hereby report a case of a 79-year-old man with afferent loop syndrome that developed 10 years after gastrectomy.

A 79-year-old man presented to the emergency department with acute-onset abdominal pain. His surgical history included total gastrectomy and Roux-en-Y gastric reconstruction for gastric adenocarcinoma 10 years before this visit. At this visit, he developed acute abdominal pain and nausea 3 h after lunch on the day of visit. The abdominal pain was colic and continuous without other gastrointestinal symptoms. His abdomen was slightly distended and bowel sounds were low-pitch and slow. There was tenderness in the middle lower quadrant of the abdomen without rebound tenderness.

Ultrasonography showed the dilatation of the duodenum or afferent loop with fluid collection inside the duct (Fig. 1A). An abdominal computed tomography (CT) showed the distension of the afferent loop alone; there was no other intestinal obstruction or peritoneal dissemination and recurrence of gastric carcinoma (Fig. 1B). A diagnosis of afferent loop syndrome was established. The patient was admitted and underwent conservative bowel decompression with a nasogastric tube. The clinical course was uneventful and the patient was discharged on day 7.

Afferent loop syndrome is an uncommon entity occurring after Billroth-II or Roux-en-Y reconstruction distal gastrectomy. The etiologies of afferent loop syndrome include adhesions, kinking, stenosis, or internal herniation after surgery. Its reported prevalence ranges from 0.3 to 1.0%.[3] Acute afferent loop syndrome usually occurs within 1—2 weeks after surgery.[2] Rarely, however, afferent loop syndrome can develop nearly a decade after the surgery. Gayer et al. reported a case of afferent loop syndrome occurring 15 years postoperatively.[4] Thus, it is injudicious to exclude the possibility of afferent loop syndrome based on the period after surgery.

Acute afferent loop syndrome occurs with sudden, strong abdominal pain and vomiting. The pain often occurs before localized abdominal tenderness and involuntary guarding develop. Severe abdominal pain out of proportion with physical findings represents a surgical emergency. The gold-standard diagnosis is abdominal computed tomography, which shows an obstructed afferent loop appearing as a fluid-filled tubular mass with a diameter of approximately 5 cm.[4] Abdominal ultrasound is another diagnostic modality, demonstrating a tubular or U-shaped structure in the upper abdomen crossing transversely over the midline.[5]

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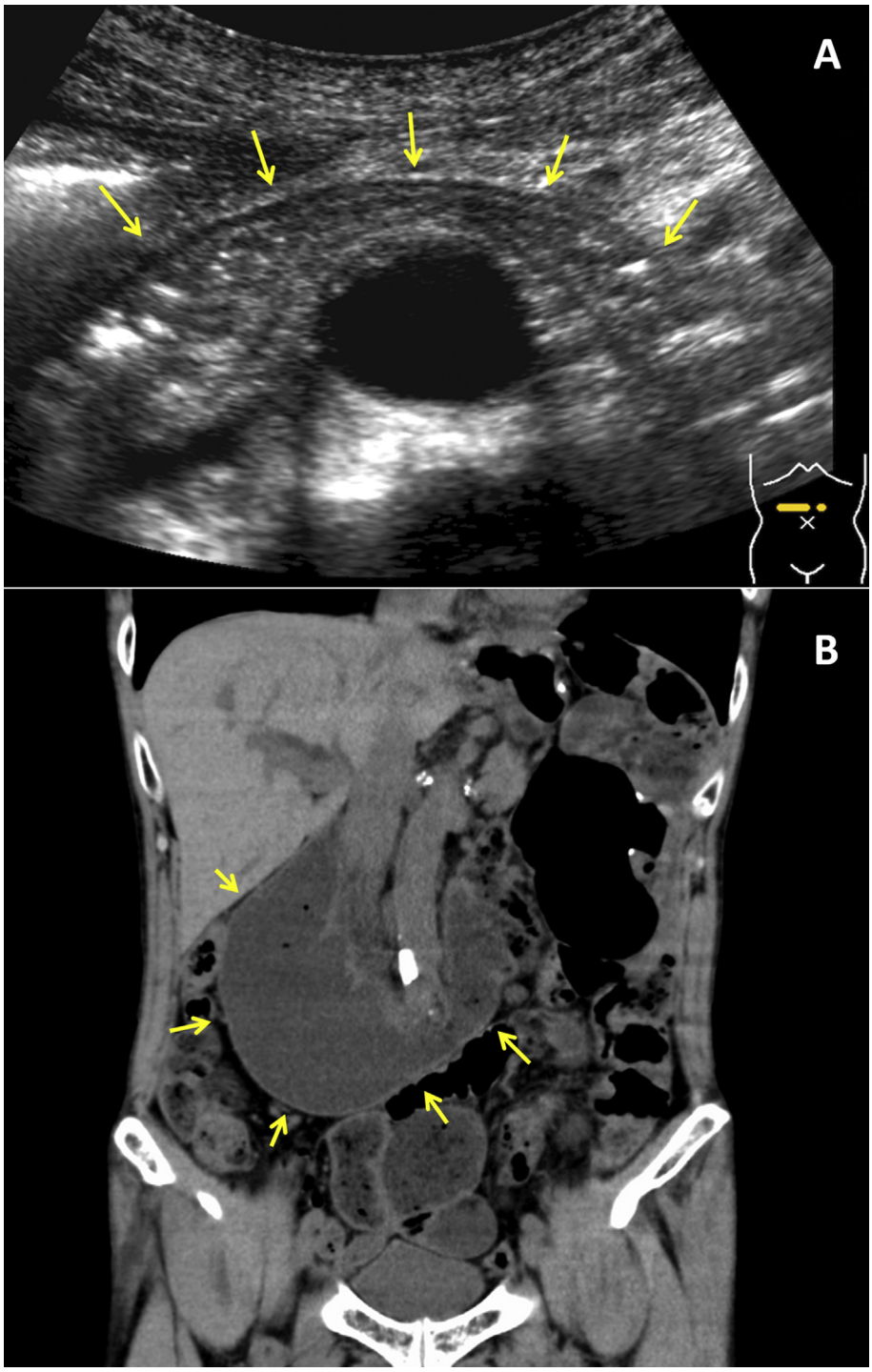

Figure 1 (A) Ultrasonography showed the distended afferent loop (arrows) over the aorta; (B) computed tomography showed the distended afferent loop (arrows).

Acute afferent loop syndrome is associated with closed loop obstruction, which can result in secondary peritonitis. Early diagnosis and immediate surgery are necessary, because it is associated with a mortality rate of 30—60%.[3]

Therefore, small bowel obstruction is not the only differential diagnosis in the remote period after Billroth-II or Roux-en-Y reconstruction distal gastrectomy. Afferent loop syndrome can develop at any time after surgery.

Conflicts of interest

None to declare.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.asjsur.2019.06.008.

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