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CLINICAL IMAGES

Severe abdominal pain as a result of acute gastric volvulus

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A 62-year-old male was admitted due to acute severe upper abdominal pain. His medical history included conservatively treated paraesophageal hernia. Abdominal examination revealed upper abdomen tenderness. Difficulty in passing a nasogastric tube was observed. Chest X-ray showed a diaphragmatic hernia and Gastrografin swallow demonstrated an "upside-down stomach" as a result of organoaxial gastric volvulus (Figs. 1 and 2). Gastric ischemia could not be ruled out and the decision was made for surgical intervention.

Exploratory laparotomy by midline incision was performed. The stomach was found to be ischemic albeit viable. The hernia content was reduced, the sac was excised, the crura were closed, and Nissen fundoplication was performed. The upper gastrointestinal (GI) contrast study on the fifth postoperative day confirmed complete reduction of the stomach. The patient remains free of symptoms 2 years after the operation.

Acute gastric volvulus (AGV) is a rare potentially life-threatening condition comprising abnormal rotation of the stomach along its longitudinal (organoaxial) axis or about an axis joining the mid lesser and greater curvatures

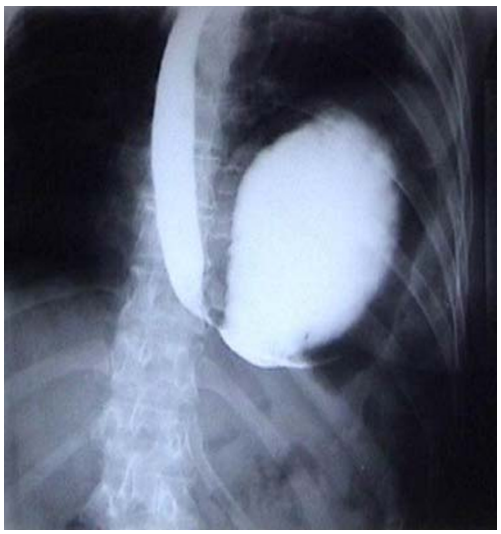

Fig. 1 Gastrografin swallow demonstrates an "upside-down stomach"

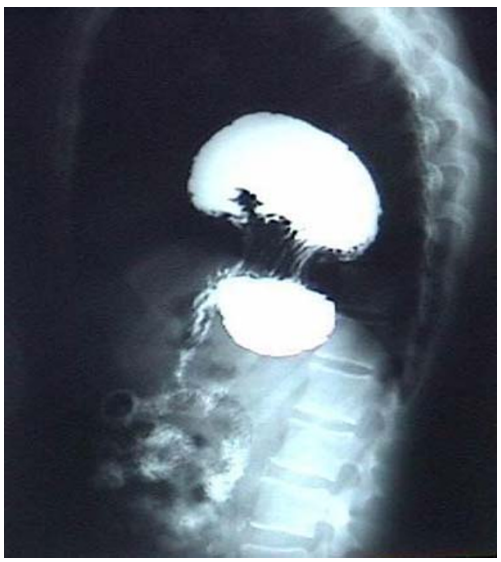

Fig. 2 Lateral view of organoaxial gastric volvulus

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(mesenteroaxial) [1]. In adults the most common cause is a diaphragmatic defect [1].

Classic symptoms of AGV are known as Borchardt's triad [2] (severe epigastric pain and distension, vomiting followed by violent nonproductive retching, and difficulty or inability to pass a nasogastric tube). If undetected, AGV can lead to ulceration, strangulation, perforation, hemorrhage, ischemia, and full-thickness necrosis [3, 4].

Diagnosis is based on contrast X-ray studies and computed tomography scan. When patients present acutely with clinical evidence of gastric compromise it is prudent to proceed immediately to exploratory surgery [5].

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