A CASE OF CLOSED LOOP SMALL BOWEL OBSTRUCTION WITHIN A STRANGULATED INCISIONAL HERNIA IN ASSOCIATION WITH AN ACUTE GASTRIC VOLVULUS

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Summary: Small bowel obstruction is a common clinical problem presenting with abdominal distention, colicky pain, absolute constipation and bilious vomiting. There are numerous causes, most commonly attributed to an incarcerated hernia, adhesions or obstructing mass secondary to malignancy. Here we present an unusual cause of a small bowel obstruction secondary to an incarcerated incisional hernia in association with an acute organoaxial gastric volvulus.

Key words: Small bowel; Obstruction; Incarcerated incisional hernia; Organoaxial gastric volvulus

Case report

A 79-year-old woman presented to the ED with a two day history of an irreducible lump at the site of a previous midline laparotomy scar. She underwent a midline laparotomy three decades earlier for exploration of a perforated appendicitis. Her current clinically apparent incarcerated incisional hernia was associated with diffuse abdominal distension, pain, nausea and non-bilious vomiting.

On laparotomy, a significantly distended and twisted stomach was found within a diaphragmatic hernia of approximately 10 × 10 cm in size, manifesting as a type III hiatus.
hernia. The small bowel was diffusely dilated proximal to the incarcerated jejunum within the anterior abdominal wall defect. It was clear that obstruction at the level of the jejunum secondary to incarceration had caused a closed loop small bowel obstruction (Figure 4) which had pushed the stomach into the diaphragmatic defect and predisposed the patient to gastric volvulus. The small bowel was viable following reduction of the incarcerated jejunum and adhesiolysis. Subsequently, a small gastrostomy was performed draining 5 litres of fluid filled with small intestinal contents. Following reduction it was clear that the stomach had twisted in an organoaxial fashion. The gastrostomy was closed with an absorbable suture and gastropexy to the anterior abdominal wall was performed. The diaphragmatic hernia was also repaired with a non-absorbable suture but reinforced with Polytetrafluoroethylene (PTFE) pledgets (Figure 5). The incisional hernia was repaired with composite mesh using an onlay technique.

Postoperatively, the patient had a prolonged recovery within the Intensive Care Unit (ICU). However, following
Intra-operative photograph following closure of hiatal defect (arrow).
clinical diagnosis and management. Upper gastrointestinal contrast studies are universally helpful to diagnose acute gastric volvulus, although CT scanning may highlight the presence of other pre-disposing factors or complications requiring synchronous treatment. In a minority of cases endoscopic intervention may be helpful, but early decompression with a nasogastric tube and prompt surgical intervention to reduce and fix the volvulus is a safe approach to managing this serious condition.

References


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