Superior mesenteric artery syndrome: an uncommon cause of intestinal obstruction
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INTRODUCTION

Superior mesenteric artery (SMA) syndrome or Wilkie’s syndrome is an uncommon cause of intestinal obstruction resulting from compression of the third portion of the duodenum when passing between the SMA and the aorta when the angle between the latter structures becomes smaller.

Etiologies include significant and fast weight loss as seen in patients with cancer, bariatric or other major surgery, severe burns, dementia, or advanced eating disorders.

Clinically, it may manifest with acute or chronic upper intestinal obstruction symptoms.

Diagnosis is primarily based on abdominal computed tomography (CT) scans with oral and intravenous contrast, which reveals a reduced angle (< 25°) and distance (< 8-10 mm) between the aorta and SMA with upstream gastroduodenal dilation. Under normal conditions, the above measurements are 38°-65° and 10-28 mm, respectively.

Conservative management with decompression using a nasogastric tube and adequate nutritional support is initially recommended. Surgical duodenojejunostomy is indicated for failed conservative management. Percutaneous endoscopic jejunostomy has been posited as potential therapy as it may modify the aorta-SMA angle and provide in addition a feeding method.

CASE REPORT

We report the case of a 75-year-old woman with Parkinson’s disease and severe dementia who presents at the ER for oral intolerance and vomiting for one week, associated with a weight loss of 35 kg during the past year. Examination reveals a distended tympanic abdomen with tenderness in the epigastrium. CT shows significant dilation in the stomach and both the first and second duodenal portions, with caliber reduction in the duodenum when passing between the aorta and SMA (which form an angle < 20°), suggestive of aortomesenteric clamp. Treatment with NGT and total parenteral nutrition is started, which resulted in complete remission and discharge from hospital after 10 days.

REFERENCES