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Images in Surgery

Wilkie's syndrome as a rare upper intestinal obstruction cause

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A 43-year-old male, with a recent history of laparoscopic left nephrectomy as a kidney donor consulted in the emergency room with persistent vomiting and progressive decrease in oral intake. The patient reported 9 kg of weight lost throughout the previous month. The symptoms started 2 weeks after the elective surgery.

An abdominal x-ray was performed showing a significative gastric dilatation without small bowel or colon distension. A CT scan with oral contrast was performed at the emergency room confirming a severe gastric and duodenal distention with an abrupt duodenal amputation on the localization of the abdominal aorta and superior mesenteric artery (Figs. 1 and 2). Oral contrast progressed properly through the stenotic duodenal portion.

a) Small intestine subocclusion due to surgical adhesions.
b) Gastroparesis.
c) Paralytic ileus.
d) Wilkie's syndrome.

The patient was admitted for a nasojejunal tube placement and enteral nutrition. He was discharged on the 4th day continuing enteral

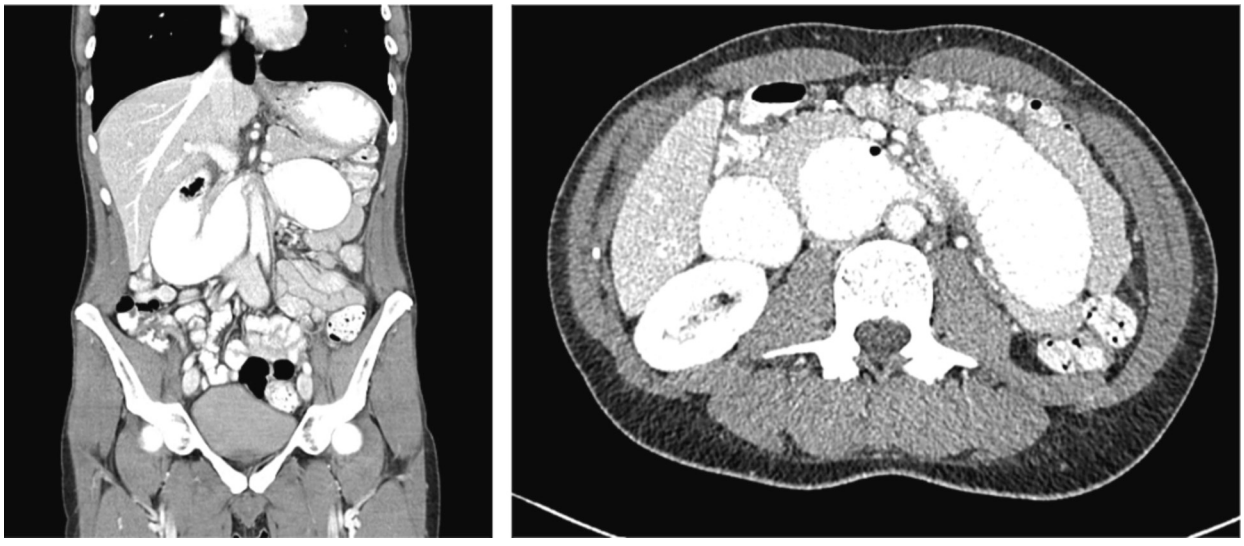

Fig 1 and 2. Computed tomography scan images.

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tube nutrition at home achieving a weight regain of 3 kg in 2 weeks. At this moment, he has restarted progressive oral intake as the tube was removed with correct tolerance.

Wilkie's syndrome, also known as superior mesenteric artery syndrome, is an infrequent cause of gastric outlet obstruction. An anatomic angle variation of the superior mesenteric artery arising from the abdominal aorta (smaller than 22°) compresses the duodenum causing intermittent subocclusion intestinal crisis (Farina et al., 2017). Its origin may vary between congenital or acquired, as an important weight loss conditions less surrounding fat between those arteries. An initial conservative treatment based on nutritional support is established in these cases as weight gain usually regresses to a correct anatomy with symptom's disappearance (Farina et al., 2017). Surgical treatment may be an option for non-responsive patients (Merrett et al., 2009).

Ethical approval

The following manuscript has implied participation of a patient. Case report was designed without modifications on the standard care due to study inclusion. Oral informed consent was obtained from the patient for publication of this case report and accompanying images.

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PD and VT performed the articles conceptualization. AB wrote the manuscript; PD and VT were revisors and made the manuscript corrections. All authors approved this manuscript.

Declaration of competing interest

The authors have no conflicts of interest to disclose.

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