

When the duodenum reaches a crossroad: Wilkie's syndrome.

AUTHORS

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CASE PRESENTATION

An **85-year-old male patient** was admitted to the emergency department with **epigastric pain alongside with vomiting and nausea**. Physical examination revealed a marked left-upper-quadrant abdominal distension. Firstly, a supine (*Figure 1A*) and erect (*Figure 1B*) PA abdominal X ray was performed, which showed a noticeable gastric chamber distention and gas distribution suggestive of **bowel obstruction**.

An abdominal CT-scan was later performed (*Figure 1C*)

DISCUSSION

Small bowel obstruction secondary to **Superior Mesenteric Artery (SMA) syndrome** (also known as **Wilkie's syndrome**) was the final diagnosis. Conservative management with nasogastric tube placement was chosen, with clinical improvement.

CONCLUSION

Wilkie's syndrome is rare vascular compressive disease, prevailing in **young women**. Its caused by a compression of the third portion of the duodenum between the abdominal aorta and the SMA, due to the anomalous course of the **SMA that originates with angle less than 22°**, resulting in duodenal obstruction. The main predisposing factors for the decrease of the aorto-mesenteric angle are **weight loss and surgeries** (most importantly correction of scoliosis). The anatomic crossroad between the SMA and the abdominal aorta must be scrutinized in abdominal imaging techniques.

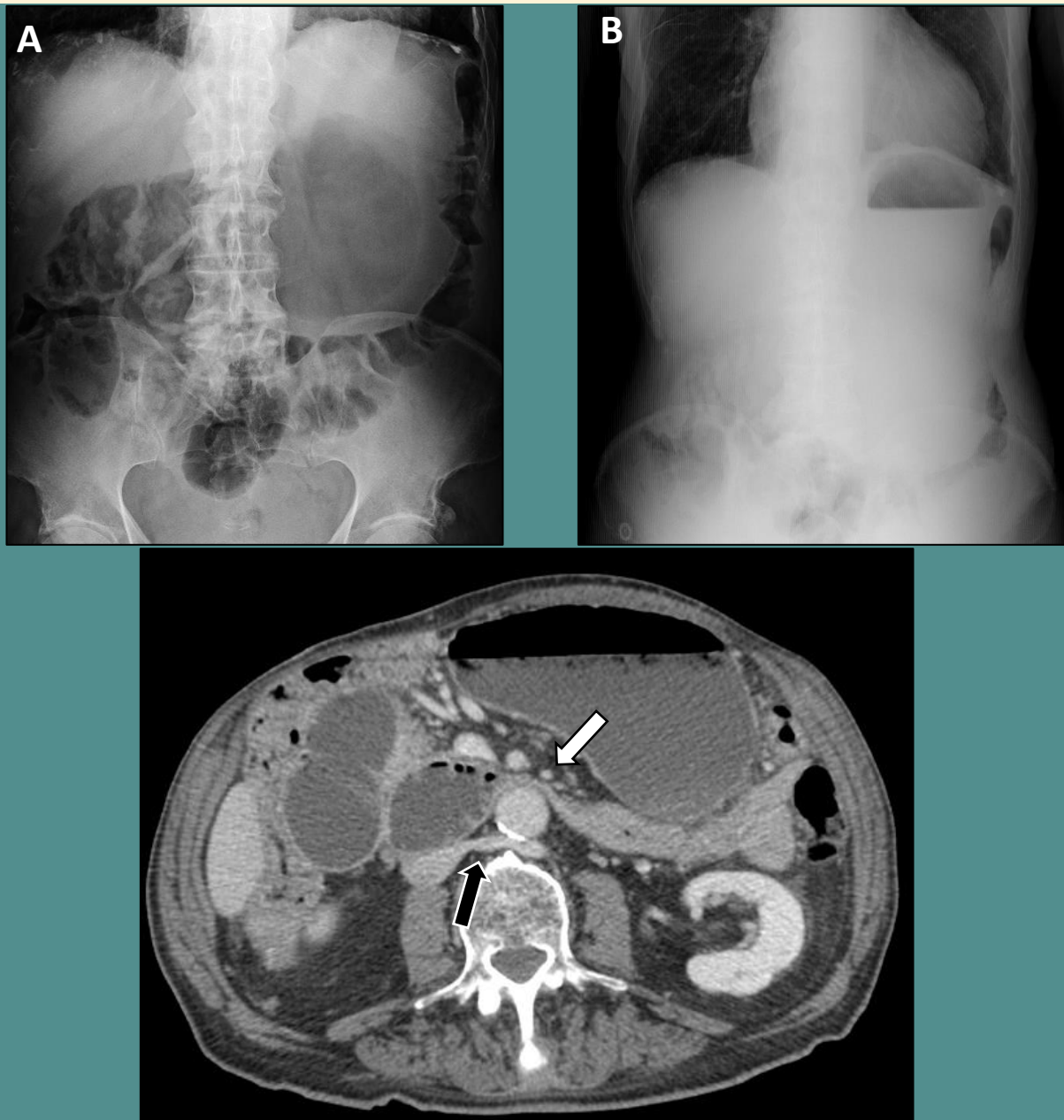


Figure 1. Abdominal X ray in supine (A) and erect (B) position showing a marked gastric chamber dilation. Contrast enhanced abdominal CT-scan (C). There's a reduction in the distance between the SMA and the abdominal aorta with a reduced angle that results in compression of the third portion of the duodenum with proximal dilation (white arrowhead). There's also a retro-aortic left renal vein (black arrow).