

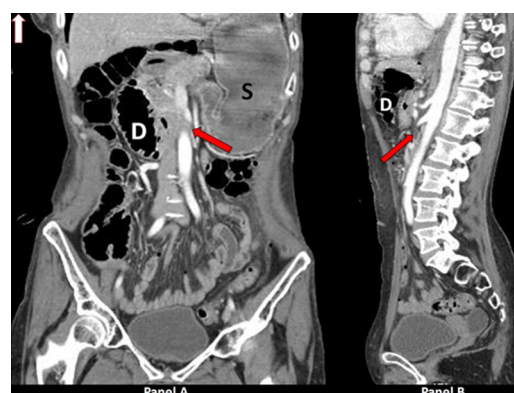
Image of the Month

Superior mesenteric artery syndrome

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A 56-year-old female with mixed connective tissue disease (scleroderma and rheumatoid arthritis) candidate for lung transplantation developed over four weeks failure to thrive with nausea, early satiety, bilious vomiting, postprandial abdominal pain and distention, and food fear. The patient experienced spontaneous wasting with rapid weight loss from 103 to 89 lbs. Her abdominal Computed Tomography scan diagnosed a superior mesenteric artery (SMA) syndrome. The coronal (Fig. 1A) and the sagittal view (Fig. 1B) demonstrate a dilated stomach (S) and duodenum (D) with decompressed entire small bowel in the pelvis. The red arrow points to the transition point in the duodenum, at the origin of the SMA, beyond which the small bowel is decompressed. The area around the SMA is devoid of retroperitoneal fat, or “cushion”, and the abdominal muscles touch the abdominal aorta and lumbar spine, indicating the severity of the patient’s nutritional status. After placement of a gastrostomy–jejunostomy tube and intensive nutritional supervision to avoid refeeding syndrome, the patient gained 25 lbs in 5 months, was able to tolerate an oral intake with resolution of symptoms, and was listed for transplantation. First described in 1861 by Carl Freiherr von Rokitsansky, the SMA syndrome is caused by compression of the duodenum between the

SMA and the aorta due to a lack of retroperitoneal visceral fat which “cushions” the SMA [1].



Reference

- [1] Rokitsansky C. *Handbuch der pathologischen Anatomie*, vol. 3, 1st ed. Wien, Austria: Braunmüller & Seidel; 1842.

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