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IMAGE | PEDIATRICS

Recurrent Small Bowel Obstruction in an Adolescent Patient

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A 14-year-old adolescent boy with a body mass index of 14.0 kg/m^2 was admitted to the emergency department with a 1-year medical history of recurrent epigastric pain associated with bilious vomiting. All episodes spontaneously resolved in 8–12 hours from onset. An abdominal computed tomography (CT) scan with intravenous contrast was performed during an acute episode (Figure 1).

The CT scan was suggestive for superior mesenteric artery syndrome (SMAS) because of the presence of a distance between the aorta and the superior mesenteric artery (SMA) of <8 mm and an angle between the aorta and the SMA of 11°. A combination of an aortomesenteric angle of <22°–25° and distance between the aorta and SMA of <8 mm associated with symptoms of partial small bowel obstruction usually correlates with a diagnosis of SMAS.[1] This is a rare condition with an estimated prevalence of 0.1%–0.3%, and a diagnosis is difficult to make based on the nonspecific, transitory symptoms at presentation.[2] Patients with SMAS may also report signs and symptoms of recurrent small bowel obstruction.[3] Although adult patients may develop SMAS secondary to dietary disorders, cachexia, sarcopenia, or severe abdominal injuries, this could be diagnosed in otherwise healthy, fit adolescents.[3] The loss of fat pad between the aorta and the SMA is the basis of this condition.

The first therapeutic approach is aimed at restoring ideal body weight. Our patient's clinical manifestation progressively resolved after weight gain, and he was free from all symptoms 1 year after the diagnosis. The surgical option with duodenal bypass should only be considered when conservative treatment fails.[3]

DISCLOSURES

Author contributions: F. Marchetti wrote the manuscript and is the article guarantor. M. Mainetti and G. Ugolini revised the manuscript for intellectual content. I.Montroni provided the images and revised the manuscript for intellectual content.

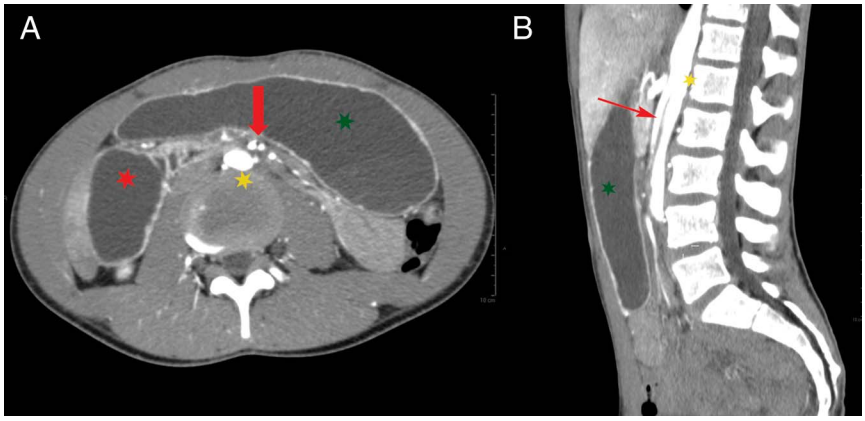

Figure 1. (A) Axial and (B) sagittal view of abdominal computed tomography showing gastric dialation (green star) with a 11° angle between the aorta (yellow star) and the superior mesenteric artery (red arrow) and duodenal dilatation (red star).

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