

An unusual cause of recurrent severe abdominal pain

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To the Editor

Celiac axis compression syndrome (CACS) is a rare cause of recurrent, nonspecific upper abdominal pain (2 per 100000 patients) (1,2). It is an extreme condition of mesenteric ischemia due to external compression of the celiac trunk. Herein, we report a case of CACS in a 44-year-old man presenting with recurrent severe abdominal pain.

A 44-year-old man admitted to our emergency department with the complaint of severe abdominal pain. He had begun to suffer from abdominal pain 12 months prior to that admission. The pain was located at the epigastric area, starting 15-30 min after meals and lasting for 1-3 hrs. He also mentioned loss of a body weight of 10 kg in the recent 6 months. On physical examination, there was mild tenderness at the epigastric area and bowel sounds were hyperactive. Blood biochemistry and hematologic tests were within normal limits. The patient underwent upper gastrointestinal endoscopy, and it revealed reflux esophagitis and duodenal ulcer. Despite peptic ulcer treatment, his cramping abdominal pain persisted and frequently required analgesics to control pain. The colonoscopy and abdominal ultrasound were unremarkable. With the suspicion of ischemic bowel disease, axial and reformatted multislice computed tomography (MSCT) was performed and revealed compression of the celiac axis by the median arcuate ligament, with poststenotic dilatation (Figure 1). Although surgical treatment was planned, the patient refused operation and chose a regular follow-up in the outpatient department with symptomatic treatment.

A vasodilator and an analgesic were initiated. He was evaluated at the outpatient clinic two months later, and still had the symptoms of postprandial pain.

CACS is compression of the celiac artery by the diaphragmatic crura, the median arcuate ligament or fibrous periaortic ganglionic tissue (3). It has been first described in 1963 and the symptoms mimic those of mesenteric ischemia (4). The clinical triad, which includes epigastric pain, weight loss, and postprandial pain with emesis is characteristic for this syndrome. The present case had 2 of those complaints. The CACS itself and its relation to the celiac artery can be shown accurately and noninvasively with multiplanar images and three-dimensional angiograms on MSCT. A variety of surgical treatment modalities have been described including endovascular, laparoscopic and open surgical therapy procedures. The open surgical therapy is a safe treatment modality, and has low mortality and morbidity. The

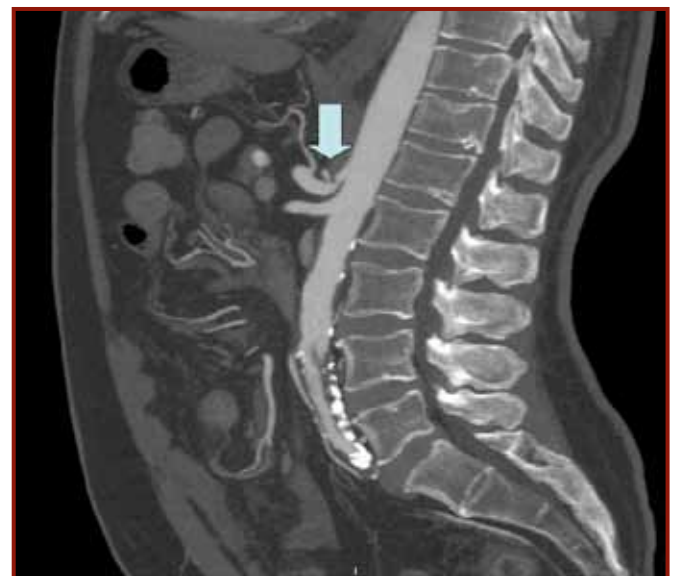


Figure 1. Computerized abdominal tomography showing compression of celiac artery by median arcuate ligament (sagittal image)

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laparoscopic approach can also be performed in the selected cases (5).

In conclusion, CACS is a rare cause of mesenteric ischemia and difficult to diagnose clinically. It should be considered in younger patients with recurrent abdominal pain and weight loss and in whom standard diagnostic procedures such as gastroscopy, colonoscopy, sonography, and computed tomography of the abdomen yield no positive findings.

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