Coeliac artery compression syndrome as a cause of abdominal pain of unknown origin

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DESCRIPTION

Coeliac artery compression syndrome (CACS), also known as Dunbar syndrome, is a rare disorder characterised by postprandial intestinal angina caused by insufficient coeliac blood supply to the gastrointestinal organs. Focal stenosis of the coeliac artery may be caused by compression by the median arcuate ligament. Although most patients with this syndrome may undergo extensive workups for causes of postprandial abdominal pain, it is difficult to make its precise diagnosis. Diagnostic methods may include Doppler ultrasound, spiral CT angiography, selective catheter angiography or MR angiography.¹ A 41-year-old man presented with a sudden onset of severe upper abdominal pain for 3 h, which started 30 min after eating meat at a riverside barbecue. He reported that he had been having similar abdominal pains, usually after meals, for the past few years but no diagnosis had yet been made. Physical examination showed a flat and non-tender abdomen with normal bowel sounds. Initial investigations, including abdominal ultrasound, contrast CT and oesophagogastroduodenoscopy, were considered normal, and he was diagnosed as acute gastroenteritis and hospitalised for close observation. On day 2, abdominal CT angiogram was reconstructed in sagittal view, demonstrating a focal narrowing in the proximal coeliac artery (figure 1). He received a revised diagnosis of CACS and he made an uneventful recovery with conservative treatment. Diagnosis of CACS can be made by radiological

approach to obtain sagittal view of the coeliac artery by using three-dimensional reconstructed CT angiogram.²

Learning points

- ▶ Coeliac artery compression syndrome (CACS) is a rare disorder but should be considered as a cause for unknown recurrent abdominal pains after eating.
- ▶ When considering CACS, it may be helpful for its diagnosis to check the sagittal view of the coeliac artery by using a three-dimensional reconstructed CT angiogram.
- ▶ Organic lesion, such as CACS, could be identified later for a medically unexplained symptom.

Competing interests None.

Patient consent Obtained.

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Figure 1 CT angiography of the celiac artery compression syndrome, showing the characteristic hooked narrowing of the proximal coeliac artery with post-stenotic dilation in two-dimensional reconstruction image (A, arrow) and three-dimensional reconstruction image (B, arrow).

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