

Clinical Image

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A rare case of aortoduodenal syndrome

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Clinical image description

An 89-year-old man with a past medical history significant for hypertension, coronary heart disease, diabetes mellitus and renal dysfunction presented with a chief complaint of nausea, vomiting and abdominal discomfort for 3 weeks. Abdominal examination was unremarkable, apart from a pulsatile mass in the central abdomen. The laboratory findings included elevation of inflammatory parameters, increased creatinine and electrolyte disturbances. Abdominal computed tomography revealed a 5.7 cm abdominal aortic aneurysm with obstruction at the horizontal portion of the duodenum and upstream dilatation (Figure 1A). Meanwhile, computed tomography angiography led to a further exclusion of Wilkie syndrome, which has interesting correlations and differences as causes of extrinsic duodenal compression. He was subsequently diagnosed with aortoduodenal syndrome. Even if surgical management is the

preferred treatment option, he was managed with medication and gastrointestinal decompression in overall consideration of his general conditions. After the symptoms improved, the patient was discharged and followed up as an outpatient. Aortoduodenal syndrome is an extremely rare entity, with only about 50 cases reported in the literature, since William Osler described the aortoduodenal syndrome in 1905 firstly [1]. Different from occurring in young women with a thin body habitus in Wilkie syndrome, aortoduodenal syndrome is ubiquitous in aging men. Moreover, we can find a decrease in mesenteric fat tissue and the aortomesenteric angle (to below 25°) is showed in the imaging of the Wilkie syndrome other than aortoduodenal syndrome. As for treatment, even if surgical resection is the treatment of ultimate choice for this disease, some argue that conservative therapy should still be the preferred course of action, as it may help to reduce adverse effects of the initial insult for whom suffered with the aneurysmal rupture [2].



Figure 1: Abdominal computed tomography revealed a 5.7 cm abdominal aortic aneurysm with obstruction at the horizontal portion of the duodenum and upstream dilatation.

Declarations

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Author’s contributions: Collection of data and writing: Wei-Feng Huang and Qi Zhang.

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