



Spontaneous Celiac Artery Dissection: A Case Report

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Case Report

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Abstract

Spontaneous visceral artery dissection is an exceptional condition. In the literature, about a hundred of cases are reported. It most often involves the superior mesenteric artery, and secondarily the celiac trunk. The presentation is non-specific and the diagnosis is usually made on imaging or at autopsy. Pre-existing vascular diseases, hypertension and pregnancy are the most involved risk factors. We report the case of a 58-year-old patient who presented for a spontaneous dissection of the celiac artery treated medically.

Keywords: Visceral Artery; Hypertension; Epigastralgia; Analgesics

Case Report

A 58-year-old patient with a high blood pressure history, presented to our emergency room with epigastralgia of sudden onset evolving from hours without vomiting or other associated signs. On examination, the patient was hemodynamically stable and had tenderness in the epigastric region. There were no other abnormalities. The biology tests revealed white blood cells count of 13800/ml and a CRP level at 22mg/l. Blood lipase and liver tests were normal. Due to this clinical presentation mimicking an acute pancreatitis, we decided to proceed to an abdominal CT-scan. It revealed a false channel of the celiac trunk without associated aneurysmal dilation (Figure 1) and an infiltration of the perivascular fatty tissue (Figure 2). The patient was admitted and a treatment with calcium channel blockers, analgesics and platelet aggregation inhibitors was prescribed. The evolution was favorable with total disappearance of pain after 72 hours from the start of treatment. He was discharged on the fifth day of treatment and a CT imaging, for control, is planned in one month.

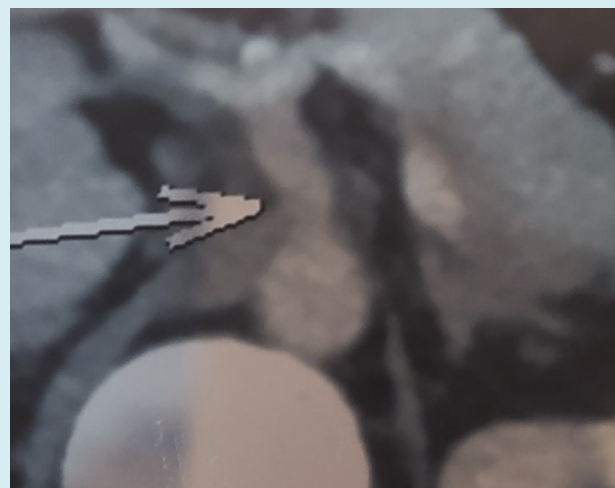


Figure 1: A false channel of the celiac trunk (arrow) without associated aneurysmal dilation.

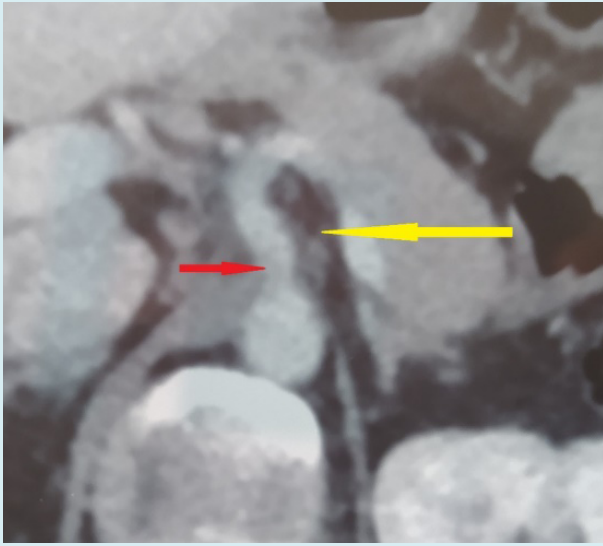


Figure 2: A false channel of the celiac trunk (red arrow) with an infiltration of the peri-vascular fatty tissue (yellow arrow).

Discussion

Spontaneous visceral artery dissection is a rare condition that was first described by Baurersfeldin 1947 [1]. It can affect the left gastric, hepatic, splenic, or celiac artery but the superior mesenteric artery is the one that is more affected [2]. The spontaneous celiac artery dissection was first reported in 1959[3]. It seems to be more frequent with-in men with an average age of 55 years [4]. The most known risk factors are those leading to weakening of arterial wall like pregnancy, hypertension, fibromuscular dysplasia, and aortic aneurysm [5] or those causing mechanical stretching and microtrauma like lifting or sneezing [6]. Visceral artery dissection has no specific clinical presentation. It is mostly asymptomatic if there is no ischemia [7]. However patients commonly present for severe epigastric or hypochondrial pain [3]. The diagnosis is usually made by imaging. In fact CT-angiography is considered to be the imaging technique of choice because it can display luminal borders and extra luminal disease [3,7,8]. Medical management consists in limiting the progression of the dissecting hematoma, controlling the blood pressure and preventing the thrombo embolic complication [7]. Outcomes are usually simple. However, it can progress to splenic infarction, intra peritoneal hemorrhage, and intestinal ischemia [9]. After the acute episode, in addition to a strict blood pressure control, and in order to prevent the thrombo embolic complications, the use of anticoagulant or platelet aggregation inhibitor is recommended during 3-6 months with a target INR of 2.0-3.0 [7,10]. Surgery is usually indicated when medical therapy fails [3]. It consists

in the resection of the dissected segment with anastomosis or by creating a bypass [7]. While endovascular treatment is being more and more reported there is no published data supporting its superiority to surgery [3]. Given the risk of aneurysmal transformation, a clinical and radiological monitoring is necessary [11]. A doppler ultrasonography should be performed at the first, the third, the sixth month and then annually. In case of modification or anomaly a CT-angiography must be performed [11,12].

Conclusion

Spontaneous dissection of the celiac artery is a rare condition. Its diagnosis is difficult in the absence of particular clinical orientation signs. The diagnosis is usually confirmed by angiography or CT angiography. Evolution is most often favorable under medical treatment. Nevertheless, radiological monitoring is necessary given the risk of aneurysmal transformation.

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