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Rupture of celiac trunk aneurysm in patient with Behçet Disease

Ruptura de aneurisma de tronco celíaco em paciente com Doença de Behçet

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ABSTRACT

We report a case of a ruptured aneurysm of the celiac trunk in a 32-year-old, male patient with Behçet Disease (BD). Aneurysm resection was performed and the patient is well during a follow up of 32 months. To our knowledge, this is the first reported case of a ruptured celiac trunk aneurysm successfully treated in a patient with BD.

Keywords: Behcet Syndrome. Aneurysm. Aneurysm, Ruptured. Celiac Plexus. General Surgery.

INTRODUCTION

Behcet's Disease (BD) is a systemic inflammatory disease of unknown etiology that may affect the venous and arterial systems^{1,2}. Celiac trunk aneurysms (CTA) comprise about 4% to 6% of all visceral aneurysms. BD is an extremely rare cause of CTA, and the rupture of these aneurysmsis even less reported³.

CASE REPORT

A male patient with 32 years of age in clinical treatment for BD for three years with immunosuppressive therapy was brought to the hospital emergency room with abdominal pain and signs of hypovolemic shock, nausea and vomiting. Physical examination showed poor general condition, emaciation and a pulsatile, expansive and tender mass in the epigastrium, besides pallor, sweating, tachycardia, hypotension and 38° C temperature. The leukocyte count was 13,600cells/mm³ and hemoglobin concentration of 9.1mg/dl. The C-reactive protein level was 193mg/dl and coagulation, renal and liver function tests were normal. After hemodynamic stabilization, he underwent a computed tomography scan of the abdomen, which revealed a voluminous saccular aneurysm of the celiac trunk (4.5cm in diameter), with the presence of hemoperitoneum (Figure 1). Soon after the examination, the patient presented hemodynamic instability, having been urgently submitted to resection of the aneurysm through clamping of the supraceliac aorta and continuous suture at the level of the celiac trunk. There were approximately 1500 mL of blood into the abdominal cavity, and transfusion of 4000 ml of blood and 4500 ml crystalloid solution was required. Histology of an aneurysm wall segment revealed fibrous adipose tissue with areas of hemorrhage, necrosis and inflammation. Neither blood culture nor bacteriological examination of the arterial wall showed bacterial growth. Postoperatively, the patient had respiratory infection, requiring prolonged mechanical ventilation and antibiotics. The scan control after 30 days showed no problems in the aortic suture line (Figure 2). The patient was discharged in 40 days with significant improvement in overall condition. He is currently being followed up 32 months after discharge.

DISCUSSION

There are few reports of BD patients treated for CTA^{1,2,4,5}. Moreover, the description of rupture cases is extremely rare³ and, regardless of the cause, is a very serious situation, with high mortality³. It is believed that the first reported case of CTA in patients with BD was in 2001¹ and that the first surgically treated case was published in 2008³. Our case seems

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Figure 1. Reconstruction of CT angiography demonstrating a massive aneurysm of the celiac trunk.

to be the first one of an CTA with free rupture to the abdominal cavity and successfully treated by surgery.

The choice of treatment for the CTA depends on variety of factors such as age, clinical condition and hemodynamic parameters, as well as size, location and multiplicity of aneurysms. For small and asymptomatic aneurysms, clinical follow-up and immunosuppressant treatment may be a good choice¹. Open surgery with ligation of the aneurysm or vascular reconstruction after resection is a good option for patients with bulky ruptured aneurysms, hemodynamically unstable or anatomy unfavorable for a less invasive treatment^{2,5}. Endovascular treatment, with implantation of endopros-

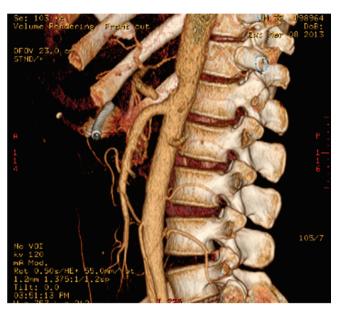


Figure 2. Reconstruction of postoperative angiography, with complete resection of the aneurysm and distal ligation of the celiac trunk.

thesis, coated stents or coil embolization, can also be used in some cases, especially in elective situations with favorable anatomy⁴. In our case, due to hemodynamic instability, we opted for the emergency open surgery with isolated aneurysm ligation without arterial reconstruction.

In short, the diagnosis of vascular complications, especially aneurysms, should be done as soon as possible in patients with BD. On the other hand, in young patients with aneurysmal disease, BD must be remembered and, in such cases, early treatment is indicated, especially in large and symptomatic aneurysms, since the rupture is the main cause of death in such patients.

RESUMO

Relatamos o caso de um aneurisma roto do tronco celíaco em um paciente de 32 anos, do sexo masculino, portador de Doença de Behçet (DB). A ressecção do aneurisma foi realizada e o paciente está bem, com acompanhamento de 32 meses. Até onde sabemos, este é o primeiro caso relatado de um aneurisma do tronco celíaco roto tratado com sucesso em um paciente com DB.

Descritores: Síndrome de Behcet. Aneurisma. Aneurisma Roto. Plexo Celíaco. Cirurgia Geral.

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