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Femoral Artery Pseudoaneurysm Secondary To Behcet's Disease: A Case Report

Behçet Hastalığına İkincil Gelişen Femoral Arterde Pseudoaneurizma

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ÖZET

Behçet Hastalığının çoğu klinik belirtileri vaskülitlere bağlı olduğuna inanılır. Büyük damar tutulumları Behçetli hastaların yaklaşık üçte birinde izlenmektedir. Bu hastalarda, perivasküler ve endovasküler inflamasyon hem arter hem de venlerde kanama, darlık, anevrizma formasyonu ve trombüs formasyonuna yol açabilir. Arterial anevrizmaların rüptürü ani ölüme yol açabilir. Biz bu olguda Behçet Hastalığına bağlı femoral arter tutulumu sonucu Pseudoaneurizma formasyonu gelişen bir hastayı sunduk.
Anahtar Kelimeler: Behçet Hastalığı, femoral arter, vaskülit

ABSTRACT

Most clinical manifestations of Behcet's disease are believed to be due to vasculitis. Large vessel vascular involvement occurs in approximately one-third of patients with Behcet's disease. In these patients, perivascular and endovascular inflammation may lead to hemorrhage, stenosis, aneurysm formation, thrombus formation in both arteries and veins, and varices. The rupture of an arterial aneurysm might result in sudden death. We report a case of Behcet's disease characterized by involvement of femoral artery pseudoaneurysm.

Key Words: Behcet's disease, pseudoaneurysm, femoral artery, vasculitis.

INTRODUCTION

Behcet's disease (BD) is a systemic inflammatory vasculitis of unknown etiology, characterized by relapsing episodes of oral aphthous ulcers, genital ulcers, skin lesions, ocular lesions and other manifestations, including vascular, gastrointestinal, neurological involvement [1].

Most clinical manifestations of BD are believed to be due to vasculitis. Among the systemic vasculitides, BD is remarkable for its ability to involve blood vessels of all sizes - small, medium, and large - on both the arterial and venous sides of the circulation. Arterial disease is most commonly a small vessel vasculitis, but medium and large vessel disease may also develop. Large vessel vascular involvement occurs in approximately one-third of patients with BD [2]. In these patients, perivascular and endovascular inflammation may lead to hemorrhage, stenosis, aneurysm formation, thrombus formation in both arteries and veins, and varices. The rupture of an arterial aneurysm might result in sudden death. Progression and recurrence are more likely in these patients and immunosuppressive treatment of this inflammation has been found to be beneficial, though patients may also require vascular surgery intervention [3]. Carotid, pulmonary, aortic, iliac, femoral, and popliteal arteries are most commonly involved; cerebral, and renal arteries are uncommonly involved [4]. We report a case of BD characterized by involvement of femoral artery pseudoaneurysm.

CASE

A 33 -year-old man was admitted because of left-leg pain for 1 month without history of trauma. He carried a diagnosis of BD at a different hospital because of a 14-year history of recurrent oral and genital ulcerations and bilateral knee arthralgias. Physical examination showed a huge pulsatile mass located 2 cm

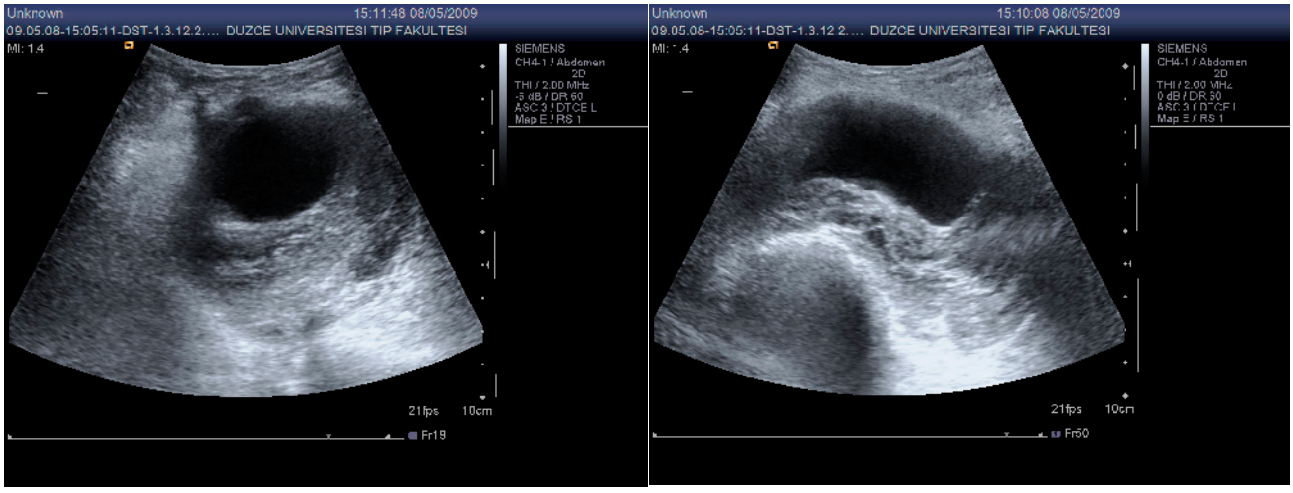

Figure 1: Radiologic examination revealed a giant thrombosed left femoral artery aneurysm (20.3 x 89 mm)

below the left inguinal ligament with tenderness and systolic bruit (grade 2) Radiologic examination revealed a giant left femoral artery aneurysm (20.3 x 89 mm, Figure 1). The patient denied any history of leg or inguinal trauma or manipulation. The patient did not have fever or chills. The erythrocyte sedimentation rate (ESR) was 30 mm/h. The patient was continuously treated with oral administration of aspirin, azathioprine, and corticosteroid. We decided to perform an operation.

DISCUSSION

Behçet's syndrome is now recognized as a systemic disorder with mucocutaneous, ophthalmic, neurologic, cardiovascular, pulmonary, gastrointestinal, urogenital, and musculoskeletal involvement [2-3]. Any artery or vein of the body may be affected, and the involvement of the vascular tree manifests itself pathologically as arterial occlusion, aneurysm, venous occlusion, and varices [2-3]. In vascular involvement, arterial lesions are less frequent than venous lesions, and the arterial lesions account for only 12% of vascular complications in Behçet's syndrome. The arterial lesions usually develop in the aorta and pulmonary artery and in their major branches. An aneurysm is present in 65% of patients with an arterial lesion and an occlusion in 35% [2-3]. Histologically, the vascular manifestation is a vasculitis of the vasa vasorum of the large arteries and veins that causes wall compromise, thrombosis, obstruction, and aneurysm formation [5]. Perforation of the arterial wall due to obliterative endarteritis of the vasa vasorum may result in aneurysm formation or rupture [5]. The most common site of aneurysm formation is the abdominal aorta followed by the pulmonary, femoral, subclavian, popliteal, common carotid, coronary, brachial, ulnar, common iliac, external iliac, tibial, renal, cerebral, axillary, and splenic arteries [1-4].

Although rupture of an arterial aneurysm is a rare event, it is the leading cause of death in patients with Behcet's disease[2,6] The pathogenesis of the aneurysm formation or rupture seems to be vasculitis resulting in obliterative endarteritis of the vasa vasorum [5]. To prevent its rupture, a surgical procedure can be performed to resect the aneurysm and replace it with a graft. However, the recurrence of a pseudo-aneurysm after its resection occurs in approximately 50% of cases, especially at the site of surgical repair, and the fragility of the vascular wall may play a major role [7-8]. Percutaneous endovascular therapy appeared to be a promising alternative for peripheral aneurysms when combined with effective immunosuppressive treatment [9-10]. The effectiveness of endovascular stent grafting for aortic and arterial aneurysms in patients with Behcet's disease has been also demonstrated, and the stent graft may represent a responsible alternative to open surgery because of the high recurrence rate after surgery [11].

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