

Multiple Aneurysms in Behcet's Disease, Revealed by a Pulsatile Crural MassChemlal M¹, Zahdi O^{2*}, Bakkali T², Hormat-Allah M², Lamliki O¹, Berrouine S¹, Idrissi H³, Cherti M¹, Nassar I³, Bensaid Y²¹Cardiology B department; Souissi Maternity Hospital, 10080 Agdal, Rabat, Morocco²Vascular Surgery department; Ibn Sina University Hospital Centre, 10104 Souissi, Rabat, Morocco³Department of Medical Radiology; Ibn Sina University Hospital Centre, 10104 Souissi, Rabat, Morocco***Corresponding author**

Zahdi O

Article History

Received: 15.10.2018

Accepted: 25.10.2018

Published: 30.10.2018

DOI:

10.36347/sjmcr.2018.v06i10.032



Abstract: Aneurysm or pseudoaneurysm is the main vascular complication of Behcet's disease. Nowadays we have both open and endovascular treatment. We report a case of Behcet's disease femoral artery false aneurysm combined with a thoracic aortic aneurysm. The patient underwent a surgical repair. And follow up for a second aneurysm repair later. For vasculo-Behcet's disease, we suggest performing the operation during the stable period. At the same time, glucocorticoids could be used with immunosuppressants preoperatively and postoperatively.

Keywords: Behcet's disease, Aneurysms, Corticosteroid therapy.

INTRODUCTION

Behcet's disease is generally defined by oral and genital ulcers and uveitis. It is also known as a recurrent multisystemic and inflammatory disease. It is mostly seen in Mediterranean countries and the Far East.

The aetiology of Behcet's disease is associated with viral, toxic, bacterial and immunological factors. It was defined in 1963 as an auto-immune disease caused by auto-antibodies against the oral mucosa [1]. Vascular involvement is 7 to 38% and it is usually seen in patients between the ages of 20 and 40 years [2]. Behcet's disease is a non-specific arterial and venous vasculitis.

Aneurysm or pseudo aneurysm is the main vascular complication of Behcet's disease.

Most hospitals adopt endovascular treatment. Proximal and distal anastomotic aneurysm formation after surgery is not rare one to 12 months postoperatively. Recurrent surgical interventions increase the risk of mortality and morbidity [3].

CASE REPORT

A 32-year-old Moroccan patient was admitted to our hospital in Mai 2018, due to a painless pulsatile mass in the right thigh.

The history of the patient revealed a Behcet's disease, treated by prednisolone, 1 mg/kg. The examination revealed a pulsatile mass of 50 mm that was diagnosed as a right common femoral artery pseudo aneurysm by Doppler ultrasonography.

CT angiography revealed a 35x40 mm pseudo aneurysm of common femoral artery with a small aneurysm of suprarenal abdominal aorta.

He was scheduled for open surgical repair of femoral artery using reverse saphenous vein graft. Before surgery, the patient received corticoides bolus and cardiac examination including echocardiography

The cardiac examination found a diastolic murmur of aortic insufficiency, echocardiography found an image of dilated aorta with a suspected aneurysm in the aorta or the pulmonary artery.

We completed the examination with an CT angiography that found an aneurysm in the aortic arch that measured 62 mm. Then he was transferred to internal medicine department; Post-operation, prednisolone 1 mg/kg with immunosuppressive drugs were continued

The surgery of the aortic aneurysm could be scheduled months later, depending on the follow up; since there is no signs of emergency and the patient are getting well with corticosteroids and immunosuppressive drugs.



Fig-1(a-b): CT images showing a false aneurysm of the right common femoral artery



Fig-2: false aneurysm of the inferior wall of the aortic arch

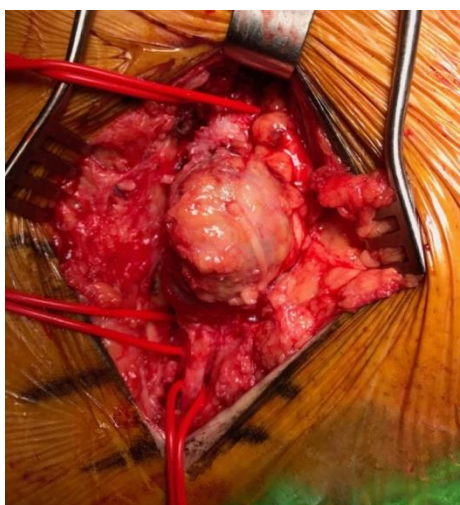


Fig-3: peroperative view of the femoral false aneurysm

DISCUSSION

Arterial involvement has been reported in patients with Behçet's disease which mostly involves

the main arteries in the form of pseudo-aneurysms, aneurysms, occlusion and thrombosis . Large vessel involvement is seen in up to 40% of BD patients [4].

Peripheral as well as main arteries can be involved, as well. The most affected sites reported for arterial aneurysm were the aorta, pulmonary, femoral, popliteal and carotid arteries.

There have been reports a similar case of involvement of the common femoral artery in the form of pseudoaneurysm in BD associated with pseudoaneurysm of thoracic aorta in a Chinese woman, who unfortunately died 1 month after surgery [5].

The treatment of vasculo-Behçet's disease includes medicine and surgery. Corticosteroid therapy and immunosuppressive drugs have been used for BD. Cyclosporine, azathioprine, anti-tumor necrosis factor (TNF) agents, applied drug control BD in the active phase is the foundation of surgery [6]. Although endovascular procedures are less invasive than open surgery, stents or stent grafts may provoke inflammation, and mechanical irritation could contribute to the recurrence of pseudoaneurysm after endovascular treatment [7].

In our case, the patient presents the association of the aneurysm of femoral artery, abdominal and thoracic aorta but only the pseudoaneurysm of femoral artery was operated soon because of its severity; the other aneurysms are followed up, to prevent post-operative inflammation since there is no life-threatening conditions.

CONCLUSION

Vascular involvement is one of the major causes of morbidity and mortality in BD: Behçet's

aneurysm has the tendency to multiply and can involve any arteries; referring to our case; in the aneurysm of thoracic aorta was accidentally discovered, we suggest looking for all kinds of vascular lesions in the medical follow-up of Behçet's disease.

REFERENCES

1. Behçet H. Über rezidivierende Aphthose, durch ein Virus verursachte Geschwüre am Mund, am Auge und den Genitalien. *Derm Wochenschr.* 1937;36:1152–1157.
2. Sakane T, Takeno M, Suzuki N, Inaba G. Behçet's disease. *N Engl J Med.* 1999; 341:1284–1291.
3. Compelling nature of arterial manifestations in Behçet disease, *JVC journal of vascular surgery* January 2005 Volume 41, Issue 1, Pages 53–58
4. Kuzu M, Ozaslan C, Koksoy C, Gurler A, and Tuzuner A. Vascular involvement in Behçet's disease: 8-year audit. *World J Surg.* 1994; 18: 948–953
5. Zhang SH, Zhang FX. Behçet's disease with recurrent thoracic aortic aneurysm combined with femoral artery aneurysm: a case report and literature review. *Journal of cardiothoracic surgery.* 2017 Dec;12(1):79.
6. Kalko Y, Basaran M, Aydin U, Kafa U, Basaranoglu G, Yasar T. The surgical treatment of arterial aneurysms in Behçet disease: a report of 16 patients. *Journal of Vascular Surgery.* 2005 Oct 1;42(4):673-7.
7. Park JH, Chung JW, Joh JH, Song SY, Shin SJ, Chung KS, Lee DY, Won JY, Kim SJ. Aortic and arterial aneurysms in Behçet's disease: management with stent-grafts-initial experience. *Radiology.* 2001; 220:745–750.