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Bilateral pseudoaneurysm secondary to intraarterial tianeptine abuse

Tianeptin kötüye kullanımına sekonder gelişen bilateral psödoanevrizma

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Introduction

Mycotic aneurysms occur due to destruction of the vessel wall, either by infection of a previously healthy artery wall, or through secondary infection of a preexisting aneurysm. Although mycotic aneurysms are frequent in femoral artery, mycotic pseudoaneurysms of femoral artery are rare (1, 2).

Tianeptine is a tricyclic antidepressant with a unique mechanism of action as a glutamatergic modulator. However, tianeptine is also known for its abuse and dependence potential (3-5).

We hereby report a case with bilateral femoral pseudoaneurysm due to intraarterial administration of tianeptine in a patient with drug addiction, and surgical treatment of this type of pseudoaneurysm.

Case Report

A 32-year-old male with a history of drug abuse was admitted to emergency clinic with a bleeding right inguinal mass in right inguinal region. The patient declared that after taking oral tianeptine tablets for 1 year as an antidepressant, he started dissolving the tablets in warm water and administering through intraarterial puncture, for the last 3 months.



Figure 1. Preoperative appearance of the pseudoaneurysm

On physical examination a pulsatile right inguinal mass, bleeding, and prominent swelling of the right leg were detected (Fig. 1). Grayscale ultrasound revealed a hypoechoic cystic lesion, 7x3.5x5 cm in diameter surrounded by mural thrombus, which connected to the arterial lumen with a large neck at the right femoral bifurcation. A heterogeneous hyperechoic area was observed around this lesion, extending from lesion to skin, which was compatible with inflamed puncture site.

Duplex Doppler examination demonstrated "to and fro" flow pattern and characteristic "ying-yang" appearance inside the lesion adjacent to the common and superficial femoral artery (Fig. 2). Consequently, the diagnosis of femoral artery pseudoaneurysm and hematoma was made.

The patient was operated under general anesthesia. A wide-based aneurysm extending from femoral artery bifurcation to anterior aspect of superficial femoral artery including a large area of destruction in superficial femoral artery was seen. Following adequate heparinization, exploration of the aneurysmal sac, control of the proximal and distal parts of the aneurysm, the aneurysm was clamped, and hematoma was completely evacuated. Aneurysmectomy was performed by interposition with autogenous saphenous vein graft (Fig. 3). Infected

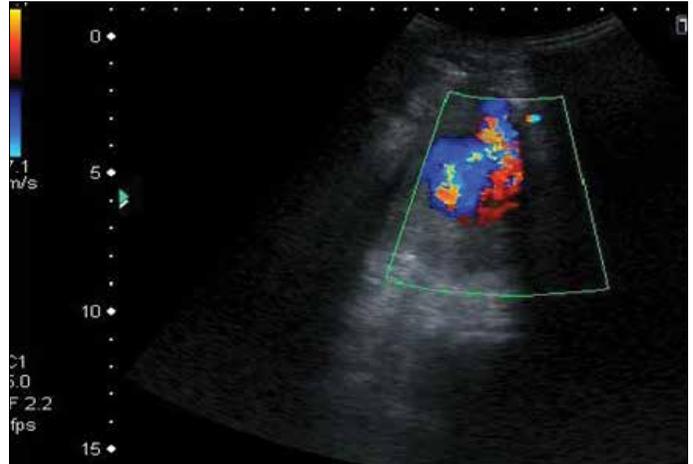


Figure 2. Color Doppler USG image showing characteristic "ying-yang" appearance in the pseudoaneurysmal sac



Figure 3. Appearance of femoral artery following interposition of a saphenous vein graft

hematoma and abscess was drained and debrided. Antibiotherapy was maintained for an average of 7 days. The patient was discharged with prescription of an antiagregant therapy.

The patient was referred to our emergency service 2 months later, this time with an infected pseudoaneurysm on the left femoral bifurcation which was diagnosed and managed by surgery using the same technique. The patient was consulted with the department of psychiatry and was referred to an experienced center for treatment of substance dependence.

Discussion

In our case, the patient presented with a femoral pseudoaneurysm, due to infection caused by intravascular non-sterile injection. IV drug abuse is a significant problem of modern societies, with increasing prevalence and subsequently increasing incidence of vascular complications, including infected femoral artery pseudoaneurysms (6, 7).

The optimal management of femoral artery pseudoaneurysms in drug abusers remains a matter of debate, because these lesions are not very common and results in most published series are based on small numbers of patients. Current treatment options include (1) excision and debridement of pseudoaneurysm with ligation of the common femoral artery without revascularization, and (2) excision and debridement of the pseudoaneurysm with routine or selective revascularization (8, 9). The latter requires arterial reconstruction, which is achieved with an autogenous or synthetic graft sited either in situ or extra-anatomically, depending on the size of the arterial wall deficit and presence of contamination. The great saphenous vein has been used as autogenous graft most frequently, although some authors also report successful utilization of femoral and popliteal veins (10). In the present case, due to interrupted infection size of the aneurysm, loss of integrity and diffuse destruction of the femoral artery, aneurysmectomy and interposition with autogenous saphenous vein graft was performed.

Conclusion

In order to prevent morbidity and mortality, early diagnosis, and appropriate surgical intervention carry utmost importance in infected pseudoaneurysms. Not only should these patients with drug abuse be managed by vascular surgery, but also they should be treated for addiction. Although rare, tianeptine may cause addiction which could lead to vascular complications like pseudoaneurysms. Therefore over the counter use of tianeptine in our country is very erroneous which must be reevaluated.

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Right coronary artery spasm-a complication of cardiac pacemaker implantation

Sağ koroner arter spazmı-Kalp pili implantasyon komplikasyonu

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Introduction

Atrial or dual-chamber pacemaker implantation for symptomatic sick sinus syndrome (SSS) represents the mainstay of treatment by providing effective relief of symptoms and lowering the incidence of atrial fibrillation, thromboembolic events, heart failure, and mortality. The procedure is usually associated with low complication rates (1).

Case Report

A 65-year-old woman was admitted in hospital for recurrent syncope due to SSS. She received indication for permanent cardiac stimulation, based on symptoms and Holter monitoring results that revealed multiple episodes of sustained atrial fibrillation and atrial flutter, alternating with sinus bradycardia and sinus pauses of 2-3 seconds (2).

She was a non-smoker patient with medical history of hypertension and dyslipidemia. There was no personal or family history of coronary artery disease.

Clinical examination at hospital admission revealed irregular rhythm with heart rate of 121 beats/min, loud sharp first cardiac sound, opening snap, diastolic rumbling murmur, and systolic murmur at the cardiac apex. Blood pressure was 150/70 mm Hg. Other findings of the physical examination were not clinically significant.