



Advanced Journal of Vascular Medicine

Case Report

Giant Femoral Artery Pseudoaneurysm Diagnosed 25 Years after War Injury -

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Submitted: 02 May 2019; **Approved:** 24 May 2019; **Published:** 28 May 2018

Cite this article: Piljic D, Petricevic M, Piljic D, Sabanovic F. Giant Femoral Artery Pseudoaneurysm Diagnosed 25 Years after War Injury. Adv J Vasc Med. 2019; 4(1): 001-003.

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ABSTRACT

Pseudoaneurysms are localized pulsatile haematoma that communicates with an artery through a disruption in the arterial wall. We report the case of a 58-year old male person with pain in the left leg and large swelling in left groin, persistent for a few years. We performed Computed Tomographic Angiography (CTA) which verified giant pseudoaneurysm of left femoral superficial artery in diameter 9.46x 9.52x 5.29 cm. Twenty five years ago during the war in Bosnia and Herzegovina patient was wounded and operated by AO method after left femur fracture. In our case, the pseudoaneurysm of superficial femoral artery might have occurred by sharp edges of fracture during initial injury or later in contact artery with longer screw.

Co-existing diseases was hypertension and alcohol abuse. The pseudoaneurysm was successfully treated by open operative technique with resection pseudoaneurysm in total and replaced it with vascular graft 7 mm.

Postoperative course was uncomplicated with surgical state and patient was discharged home on 10th postoperative day. Extended postoperative course was due to psychic episodes caused by alcohol withdraw.

Patient postoperative period has been followed up for the two years was with satisfactory clinical state.

In conclusion, we present the case of a rare post-traumatic giant pseudoaneurysm of the femoral artery that was successfully managed through open vascular surgery. Giant aneurysms are prone to complications treated by endovascular methods. Endovascular treatment would leave large aneurysmatic sac. Because of its delayed presentation, surgeons should be aware of the possibility of such a lesion of artery after an initial trauma.

CASE REPORT

We admitted 58-year old male person with pain in the left leg and large swelling (tumefaction) in left groin, persisting for a few years. Physical examination revealed a huge pulsatile mass extending infrainguinally. We performed Computed Tomographic Angiography (CTA) which verified pseudoaneurysm of left femoral superficial artery in diameter 9.46x 9.52x 5.29 (Figure 1).

Twenty five years ago during the war in Bosnia and Herzegovina patient was wounded and operated by AO method after left femur fracture. We report on a case of a delayed huge pseudoaneurysm of the superficial femoral artery that occurred more years after operative

treatment of a femur fracture in order to keep in mind the possibility of the delayed presentation of vascular injury after a proximal femur fracture. In our case, the pseudoaneurysm of superficial femoral artery might have occurred by sharp edges of fracture during initial injury or later in contact artery with longer screw.

Co-existing diseases was hypertension and alcohol abuse. The pseudoaneurysm was successfully treated by open operative technique with resection pseudoaneurysm in total and replaced it with vascular graft 7 mm interpositum (Figure 2).

Postoperative course was uncomplicated with surgical state and patient was discharged home on 10th postoperative day. Extended



Figure 1: Computed Tomographic Angiogram (CTA) with contrast showing giant pseudoaneurysm of superficial femoral artery and appearance of pseudoaneurysm.



Figure 2: Postoperative Computed Tomographic Angiogram (CTA) showing patency of the vascular interpositum graft.

postoperative course was due to psychic episodes caused by alcohol withdrawal.

Patient postoperative period has been followed up for the two years was with satisfactory clinical state.

INTRODUCTION

Pseudoaneurysm is localized pulsatile hematoma that communicates with an artery through a disruption in the arterial wall [1]. Pseudoaneurysms are caused by trauma, iatrogenic vascular interventions, anastomotic disruption and in intravenous drug abusers. Pseudoaneurysms can be asymptomatic or manifest as a pulsatile mass or thrill. Rarely, they rupture leading to a life-threatening shock. The diagnosis is confirmed by various imaging techniques false aneurysms of arteries can occur with blunt injury in the form of fracture and dislocation of joints. Arterial damage can occur because of bone spikes, screws, drills, displaced implants and retraction of surrounding tissues [2].

DISCUSSION

The chance of injuring superficial femoral artery may increase by deep insertion of drill bit or the repetitive arterial pulsation on prominent distal interlocking screw tip during the perioperative period [3].

The detection time of traumatic pseudoaneurysm varies from hours to years, depending on the regions involved and the clinical symptoms and signs that are manifested, including enlarged pulsatile swelling, palpable thrill, pain, edema, and compressive neuropathy [1].

Current therapeutic methods include open surgical repair, ultrasound-guided compression, ultrasound-guided injection of thrombin and endovascular repair using coil embolization or insertion of a stent-graft [4].

In conclusion, we present the case of a rare post-traumatic giant pseudoaneurysm of the femoral artery that was successfully managed through open vascular surgery. Giant aneurysms are prone to complications treated by endovascular methods. Endovascular treatment would leave large aneurysmatic sac. Because of its delayed presentation, surgeons should be aware of the possibility of such a lesion of artery after an initial trauma.

INFORMED CONSENT

The patient provided written informed consent for publication of the figures.

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