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An Anevrism Isolated of the Deep Femoral Artery about an Operated Case in Mali

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Abstract **Case Report**

The authors report the case of an isolated aneurysm of the deep femoral artery of a 60-year-old patient with no specific medical and surgical history in whom the examination found ischemic syndrome of the lower limb. She received a full cure under locoregional anesthesia, the surgical outcome of which is favorable. We review the literature and take stock of aneurysm pathology.

Keywords: Aneurysm, Femoral Artery, Vascular surgery, MALI.

INTRODUCTION

Isolated deep femoral artery (PFA) aneurysms are very rare. True aneurysms of non-traumatic origin in AFP represent 1 to 7% of all femoral aneurysms [1]. There are therefore no management recommendations either for the indication, especially in cases of asymptomatic aneurysm, or for the treatment. The choice of technique is based on the experience of the operator, the anatomy and the technical platform during the treatment, in particular the symptoms present and the general condition of the patient [2].

CASE REPORT

This is a 62-year-old patient with no notable medical or surgical history admitted to the ANDRE FESTOC cardiopediatric surgery department for the recent appearance of a painful left thigh mass of sudden onset and lameness on walking. the left. This patient had no cardiovascular risk factors other than age and female sex. The examination did not find any recent notion of trauma to the femoral region or of invasive procedures (arterial or venous puncture, surgery). On examination, she presents in good general condition with colored conjunctivae and hemodynamically stable. She has no fever or chills. Locally there was a voluminous pulsatile mass, non-beating and non-expansive posteromedial, but painful in the left thigh with normal looking skin. All pulses were felt in both lower limbs. The pencil Doppler finds flux. He had no sensory or motor impairment in the entire left lower limb. An angio-CT scan of the vessels of the lower limb was performed and found an isolated aneurysm of the deep femoral artery 90x70 mm in diameter with intramural thrombus at the terminal portion of the deep artery, without signs of rupture. no distal embolization (Figure 1). The superficial femoral artery as well as the three right leg arteries were patent. There were no other aneurysmal locations in the patient. Biology did not find a biological inflammatory syndrome (CRP <5mg / L and no hyperleukocytosis) but normochromic microcytic anemia. The patient was treated with open surgery under locoregional anesthesia. It was placed on an operating table in the supine position and approached via the anterior approach of the thigh through a longitudinal incision of the femoral fold straddling the swelling. After careful dissection of the mass and placement of the superficial femoral artery on the lake. General heparinization was done after clamping. We decided to open the aneurysm sac. Surgical exploration found a large hematoma (figure 2) located in the middle 1/3 of the left thigh. After evacuation of the hematoma, an aneurysm sac developed at the expense of the terminal portion of the deep femoral artery is discovered. The surgical procedure required a direct suture of the neck of approximately 1cm with 5/0 prolene followed by verification of hemostasis and placement of suction redons. She received heparin sodium from a 300IU / Kg / day syringe pump for 5 days. The immediate post-operative consequences were

simple. The clinical course was favorable and then implemented under Antiplatelet therapy. The postoperative follow-up at 6 months was favorable.

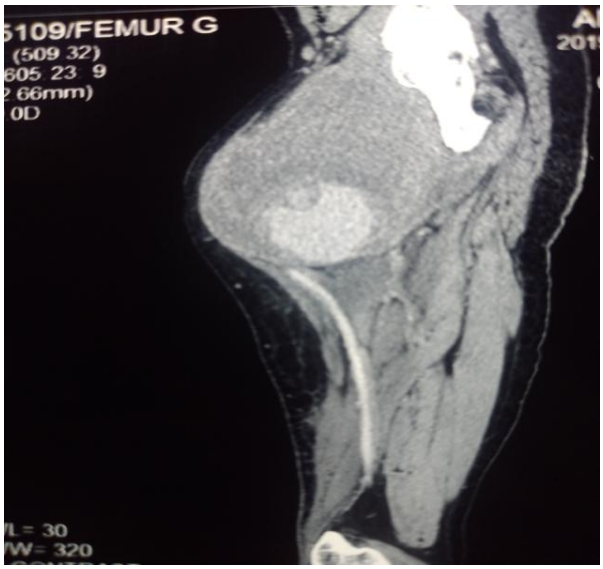

Fig-1: An image showing a large hematoma with excavation of the contrast medium

Fig-2: Operative view of the hematoma

DISCUSSION

Deep femoral artery aneurysms obviously have some similarities with common femoral artery aneurysms, but they are more common in men over 70 years of age and often associated with another aneurysmal location [1]. However, Isolated deep femoral artery (PFA) aneurysms are very rare. AFP involvement is less common because of its deep course [2, 3], anatomically protected from external trauma by the vastus medialis muscle of the thigh throughout its downstream territory. However, this artery is vulnerable to internal trauma in the event of a subtrochanteric fracture or during osteosynthesis of the femur [1,4]. Intramedullary nailing and screw-retained plate osteosynthesis are the main causes of iatrogenic trauma in AFP. The wound can occur while drilling the bone or directly caused by the screw itself. AFP pseudoaneurysms are a classic complication of orthopedic and trauma surgeries of the proximal thigh [6-8]. In our case, we did not find a notion of traumatic and orthopedic surgery, but the other possible etiologies are infection or inflammatory pathologies [4]. On the other hand, tuberculosis infection is reported in some African studies as the first etiology in sub-Saharan Africa.

The treatment of choice is endovascular or surgical. When arteriography is available, the gold standard treatment would be stent insertion and embolization for AFS and AFP, respectively. In general, the endovascular procedure avoids the surgery which could be complicated in the presence of inflammatory tissue and anatomical deformities caused by the aneurysm sac. The stent is also of interest in associated AVF and in inoperable patients. The downside with this type of treatment is the need for dual antiplatelet therapy while the alternative would be conventional surgery to repair or ligate the artery.

In case of doubt about an anastomotic stenosis, it is preferable to set up a venous bypass as was the case in our observation.

CONCLUSION

Due to their location, the diagnosis and management of deep femoral artery aneurysms can be difficult. The options can be exclusion with or without revascularization. In our context we opted for a direct suture of the neck with a good result because we do not have an endovascular image intensifier. This technique is easy in developing countries like Mali which does not have endovascular.

Conflict of Interest

The authors do not declare to have any conflicts of interest

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