

Total Section of the Common Femoral Vein Following a Bicycle Accident in a 16-Year-Old Child: A Case Report

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Abstract

Traumatic of the common femoral vein has never been reported in the English literature. The case is here reported of a child with a traumatic total section of the common femoral vein in a bicycle accident, which was initially misdiagnosed as an arterial ischemia. This is a very rare clinical condition, but this diagnosis should be among those considered for post-traumatic unexplained thigh pain after trauma.

Keywords: *Femoral Vein; Bicycle Accident; Arterial Ischemia*

Introduction

Vascular trauma to the limbs is fortunately rare [1] in children (about 0.6% of childhood trauma admissions). Their rarity is directly correlated to the lack of research on them, but their frequency continues to increase with the development of means of transport and the rise in the crime rate among an increasingly young population.

The aim of this work is to report a case of total section of the common femoral vein without associated arterial lesion following a bicycle accident.

Observation

We report the observation of a 16-year-old child victim of a bicycle accident that caused a penetrating wound of the left thigh.

Physical examination showed significant mucocutaneous pallor; enormous swelling of the left Scarpa with two orifices, one on the outer side of the thigh and the other on the ipsilateral Scarpa associated with the abolition of the pulses of the corresponding lower limb. Doppler ultrasound examination was not performed. The patient was operated on with the diagnosis of arterial ischemia of the left lower limb.

The patient was placed under endotracheal general anesthesia, in supine position. A vertical left scarpa incision was made.

Operative exploration showed a huge hematoma of the Scarpa compressing the common femoral artery with total section of the common femoral vein with loss of venous substance 04 cm in length with thrombosed extremities without associated nerve or arterial lesion (Figure 1 and 2). This was assumed responsible for the symptoms of ischemia. The procedure consisted of repairing the vein via the ipsilateral cephalic vein.



Figure 1: Intraoperative image with restoration of venous continuity.

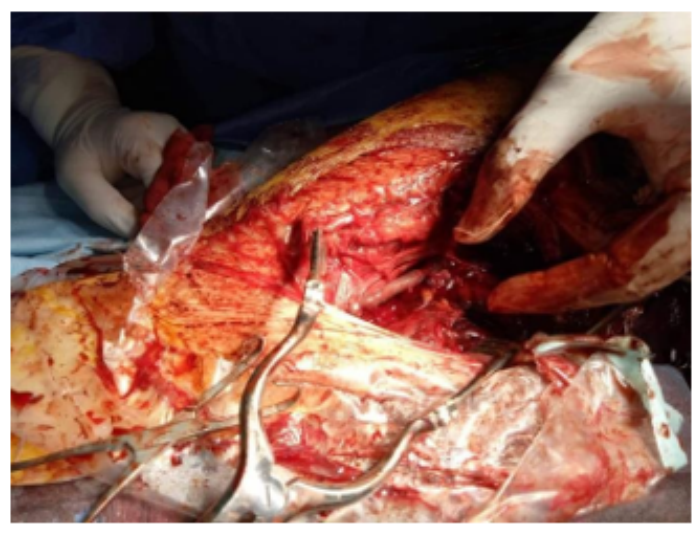


Figure 2: Intraoperative image with restoration of venous continuity.

Results

The intraoperative follow-up was favorable in terms of revascularization of the left lower limb with reappearance of the left femoral, popliteal and pedal pulses with warm and mobile limb. Stay in intensive care unit was one day. Immediate and medium-term postoperative

follow-up favorable on the vital and functional levels Venous Doppler echo of control of the traumatized lower limb showed a permeable assembly without anastomotic stenosis or signs of thrombophlebitis.

Discussion

There are few published reports of common femoral vein section after lower limb trauma [1].

The patient's symptoms suggested an arterial injury. We believe that failure to precisely diagnose this case before surgery was due to its rare occurrence. The symptoms of arterial ischemia of the patient were due to compression of the common femoral artery by the hematoma [2].

Autologous vein grafts can be used in the reconstruction of a common femoral vein. The loss of femoral venous substance was successfully performed using a femoral vein interposition autograft from the ipsilateral cephalic vein [3-5].

The most formidable complication in this type of accident is thrombophlebitis of the lower limbs, which is why the patient was put on preventive antithrombotic drugs: Sintrom for 6 months [6,7].

Conclusion

In conclusion, this is the first reported case of a post-traumatic total section of the common femoral vein in child with scarpa hematoma compressing the femoral artery. It may appear to be an arterial section and lead to a surgical procedure. Although this is an extremely uncommon occurrence, it is an important diagnostic consideration when examining a patient with a post-traumatic swelling.

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