BLUNT TRAUMA OF THE FEMORAL ARTERY: CASE REVIEW IN A TRAUMA CENTER

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This is a case review of blunt traumas of the femoral artery conducted in Hospital Groote Schuur, South Africa that updates an issue that has always been on the spotlight: the blunt trauma of the femoral artery. Rayamajhi et al. conducted a review of cases admitted to the trauma center of this hospital from January 2002 through December 2012. They collected demographic data, injury mechanisms, perioperative data, and information on the surgical techniques used.

The authors identified a total of 158 patients with femoral injuries, 91% were males and the mean age was 28 years. A total of 76% of the patients showed hard signs of vascular injuries, and 14 patients (22%) had motor deficits with suspected advanced muscle ischemia (Rutherford IIb). Soft vascular signs were non-pulsatile hematomas (n = 31) and a reduction of distal pulses (n = 49). The superficial femoral artery was the vessel most often damaged (87%) and the most common types of injury were tears (39%), and dissections (37%). Regarding the type of repair, the authors attempted primary repairs in 51% of the cases, used interposition vein grafts in 33% of the cases, and implanted prostheses in 10% of the cases. A control procedure with a temporary shunt was required in 12 cases. Also, in this group, secondary amputations were more common (n = 4). Associated venous injuries were confirmed in 78 patients (51%) that required repair in 12 cases. A total of 22% of the patients was admitted to the hospital with signs of compartment syndrome (n = 34). A total of 4 primary (2.5%) and 10 secondary amputations (6.5%) were reported. No deaths were reported. The risk factors for amputation that reached statistical significance were limbs with threatened feasibility at admission, the use of a temporary shunt, and the lack of distal pulses in the postoperative. While analyzing the cases that ended up in amputation, the authors described other potential risk factors although these did not reach statistical significance in this retrospective analysis. Also, they recommend speeding up in-hospital times until surgery, assessing compartment syndrome to avoid delayed fasciotomies, and the angiographic control of patients who do not recover distal pulses in the immediate postoperative period.