

CASE REPORT : GOOD OUTCOME OF DELAYED FEMORAL ARTERY REVASCULARIZATION IN FEMUR FRACTURE WITH VASCULAR INJURY

¹MZ Mohd Hafiz, ¹I Azhari, ²N Muhd Hilmi, ²S Fadhil

¹Department of Orthopedic Surgery, HUSM, Kelantan

²Department of Orthopedic Surgery, Hospital Sultanah Nur Zahirah,

INTRODUCTION

The management of traumatic vascular injury is often not optimum due to late diagnosis and delayed referrals. We report a case of superficial femoral artery thrombosis following a closed femur fracture that was diagnosed and intervened late, but produced acceptable outcome.

CASE REPORT

17 year old boy, a motorbike rider sustained closed femur fracture after skidded alone. Initial local examination revealed deformity over left thigh without open wound. Posterior tibialis and dorsalis pedis artery were not palpable but doppler signal were triphasic. Patient was admitted with adequate immobilization without any concern for vascular injury in view of good doppler signal. After 24 hour admission, extremity appeared colder, capillary refill time was delayed with doppler showing biphasic. Urgent CT Angiography showed 3cm non opacified segment of superficial femoral artery at fracture level (Figure1). Patient was referred to HUSM for urgent exploration. Intraoperatively, superficial femoral artery thrombosed about 4cm in length (Figure2). Autologous saphenous vein graft reconstruction was done for arterial injury and fracture fixed with DCP plate (figure3). After surgery, patient had a good vascular and limb functional outcome.

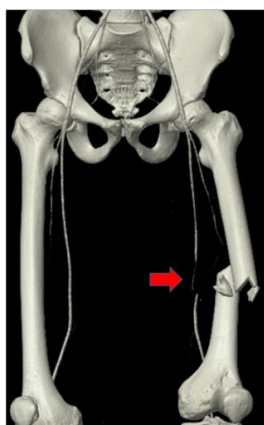


Figure 1



Figure 2

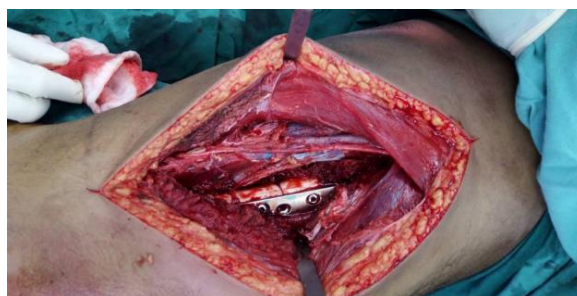


Figure 3

DISCUSSION

The 'golden period' to maximize limb salvage as proposed by many literature is 6 hours of warm ischemic time⁽¹⁾. Generally, delayed revascularisation is associated with higher amputation rate. However, there are studies who showed that delayed intervention had produced acceptable outcomes^(1,2). Functional outcome was influenced more by the nature and pattern of injury rather than the ischemic time⁽¹⁾. This also depends on the presence of satisfactory collateral flow in femoral region. Early intervention for vascular injuries is important but delayed revascularization should also be considered especially in cases with evidence of collateral supply.

REFERENCES

- 1) The Outcomes of Salvage Surgery for Vascular Injury in The Extremities: A Special Consideration For Delayed Revascularization, WI Faisham, MalaysOrthop J. 2014 Mar; 8(1): 14–19.