

Case Report: An Undiagnosed Pseudoaneurysm From An Open Fracture Of Tibia

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INTRODUCTION:

An incomplete rupture of an artery with leakage of blood to surrounding tissue following a trauma might progress to develop a traumatic pseudoaneurysm. The uninjured part of the vessel will prevent constriction of the vessel after trauma. This will eventually cause an uncontrolled bleeding, leading to hematoma formation and finally developing a traumatic pseudoaneurysm after reorganisation of the tissue.¹

CASE REPORT:

A 49 years old gentleman was referred to our hospital for purulent discharge of his left leg for two months after sustaining an open fracture grade IIIA of left tibia and fibula. During admission, he had persistent bleeding from his wound site and has required 4 pints of blood transfusions. An ultrasound was done and a pseudoaneurysm was found (Figure 1). We then proceeded with computed tomography angiogram. The pseudoaneurysm was noted to be situated at the distal of left posterior tibial artery, near the fracture site, with patent left anterior tibial and other collateral arteries.

RESULTS:

He underwent resection of pseudoaneurysm with ligation of posterior tibial artery and Illizarov External Fixator application (Figure 2). The bones were found to have no signs of infection and hematomas were evacuated.

DISCUSSIONS:

A pseudoaneurysm of blood vessels can occurred after a partial injury sustained from trauma. The uninjured portion of the vessel prevents vasoconstriction and causes uncontrolled bleeding with hematoma formation. Reorganisation of the hematoma will eventually formed a pseudoaneurysm.¹ The turbulent blood flow continues and distal pulses can be present. Distal pulse insufficiency is usually rare.²

It can present as a soft tissue mass that mimics abscess, neoplasm or ganglion.³ The reorganisation stage of the hematoma can present with signs of inflammations which can be confused with abscess.

FIGURE 1: Ultrasound scan showing the pseudoaneurysm.

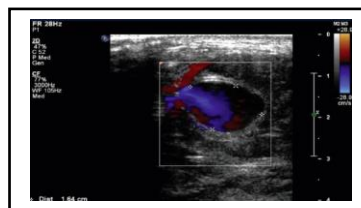


FIGURE 2: Intra-operative image of the pseudoaneurysm at the posterior tibial artery (arrowhead).



CONCLUSION:

Clinician should have high index of suspicion of a pseudoaneurysm in a wound with persistent bleeding with vague presentations.

REFERENCES:

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