

Case	(508) Post-traumatic arterial thrombosis. imaging findings.
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CASE PRESENTATION

A 16 year-old patient who went to emergency service after suffering an acute inguinal trauma with a bicycle handlebar.

Physical exploration revealed an inguinal hematoma and weakness of femoral pulse.

Duplex-ultrasound showed a superficial hematoma and occupation of the superficial femoral artery light, so the study was completed with a Computed Tomographic Angiography of the limb, confirming the absence of repletion of contrast 1cm away from the beginning of the vessel, recovering after a filiform pathway.

The patient was operated urgently, the hematoma was drained and the external indemnity of the vessel was checked; The only finding was a post-traumatic thrombosis of the superficial femoral artery, without intimal damage, so the surgeon carried out a thrombectomy and the vessel recovered the normal pulse.

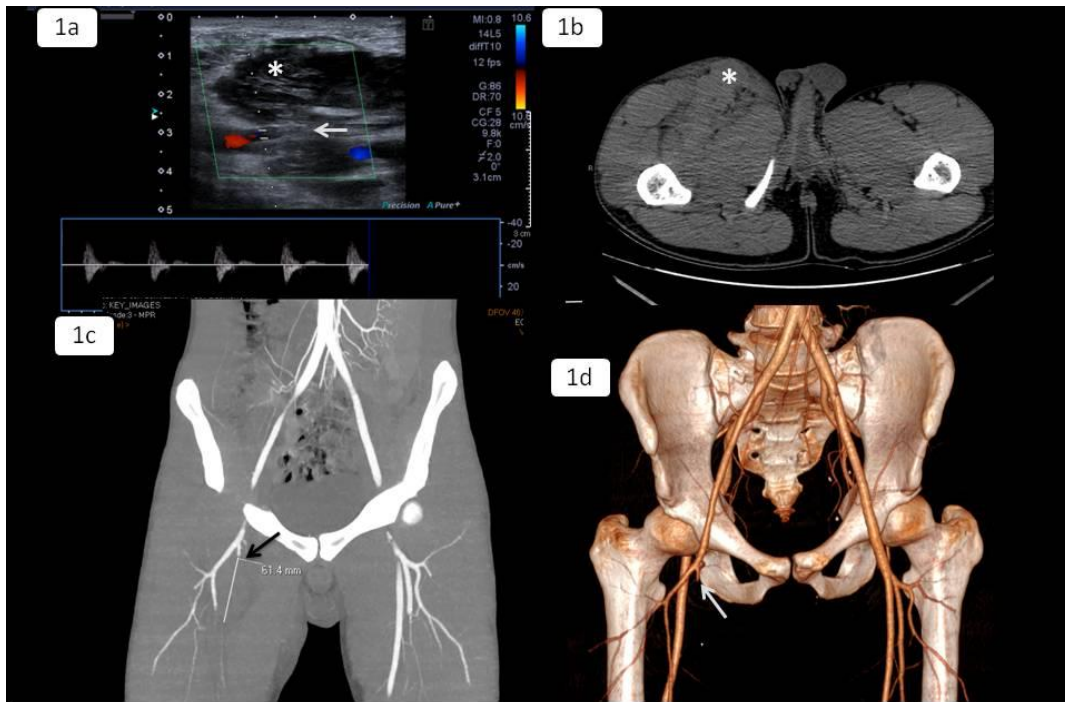
DISCUSSION

Traumatic injuries of femoral artery normally are an unusual complication of blunt trauma, and in most cases are presented combined with bone fractures (1). Vascular injuries need early diagnosis and treatment to avoid severe complications. When these injuries are not presented in combination with bone lesions, they may be infradiagnosed; also the lack of familiarity with these lesions can delay the diagnosis and increase the morbidity (2). More than 6 hours of delay could jeopardise the limb viability.

In order to reach an early diagnosis, physical examination should be combined with duplex-ultrasound and CT-Angiography, which is considered the current imaging method of choice for diagnosis arterial traumatic injuries in extremities; CT is a rapid and non-invasive imaging technique that shows high sensitivity and specificity in the detection of vascular injuries in extremities (1).

CONCLUSION

In an inguinal trauma with a bicycle handlebar, specially with childrens, we have to dismiss the possibility of a vascular injury as an early diagnosis is essential to recover the viability of the limb, being CT-Angiography the diagnosis method of choice whenwe suspect a vascular trauma.



1a. Duplex ultrasound showing inguinal hematoma (asterisk) and occupation of femoral artery lumen with echogenic material (white arrow). **1b.** CT without contrast with inguinal hematoma (asterisk). **1c.** MIP reconstruction that reveals a stop next to the origin of femoral superficial artery (arrow) and remains at approximately 6cm followed by a filamentary pathway. **1d.** CT-Angiography VR reconstruction with femoral artery interruption close to its origin (arrow).

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