

LESION OF COMMON FEMORAL ARTERY AFTER PERTROCHANTERIC FRACTURE

Marin Marinović¹, Vedrana Mužić Radović², Endi Radović³, Ana Marija Marinović⁴, Klara Radović⁵

¹Clinical Hospital Centre Rijeka, Department of Traumatology, Rijeka, Croatia; ²Hospital for Medical Rehabilitation of the Heart and Lung Diseases and Rheumatism-Thalassotherapy Opatija, Opatija, Croatia; ³Hospital for Medical Rehabilitation Thalassotherapy Crikvenica, Crikvenica, Croatia; ⁴University of Split, University Department of Forensic Sciences, Split, Croatia; ⁵Sapienza University of Rome, Rome, Italy

INTRODUCTION

- Lesions of vascular arterial structures as a result of pertrochanteric fractures **are very rare** and occur in 0.2% of patients.
- The iatrogenic vascular injuries are caused by **repositioning of bone fragments, poor retractor positioning or screw malpositioning.**
- They manifest as **acute bleeding immediately and, as subacute hematoma** with possible formation of **an arterial pseudoaneurys,** respectively.

Fig. 3 MSCT reconstruction

← recurrent hematoma



CONCLUSION

- Although, lesions of vascular arterial structures caused by pertrochanteric fractures are **rare, surgeon has to think of it.**
- Depending on the type of arterial lesion (**acute bleeding, subacute hematoma and arterial pseudoaneurys**), necessary is to recognize and verify it with an adequate diagnostic method and **treat it surgically.**

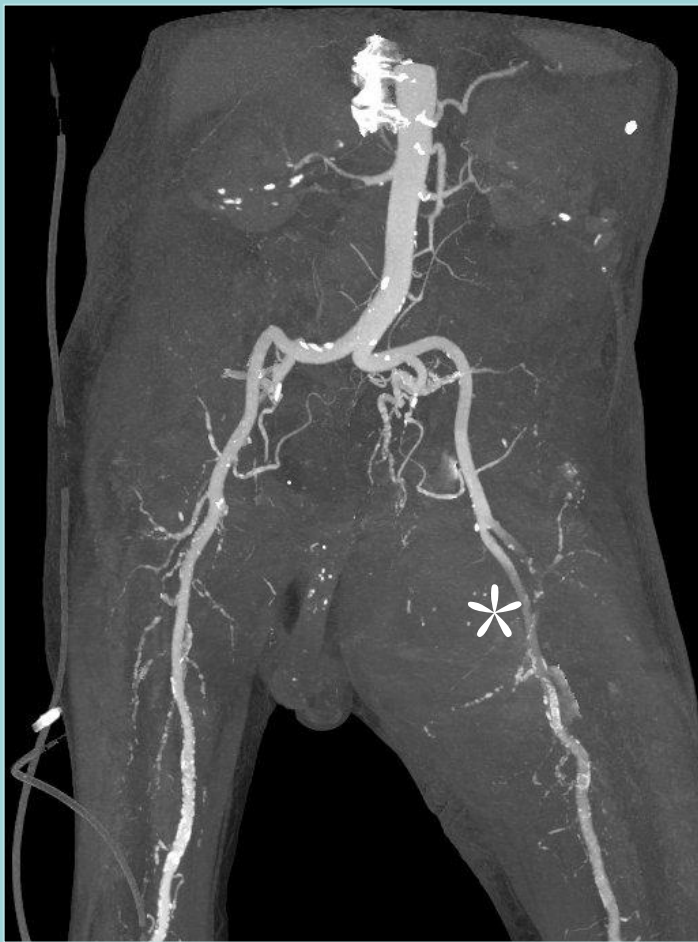
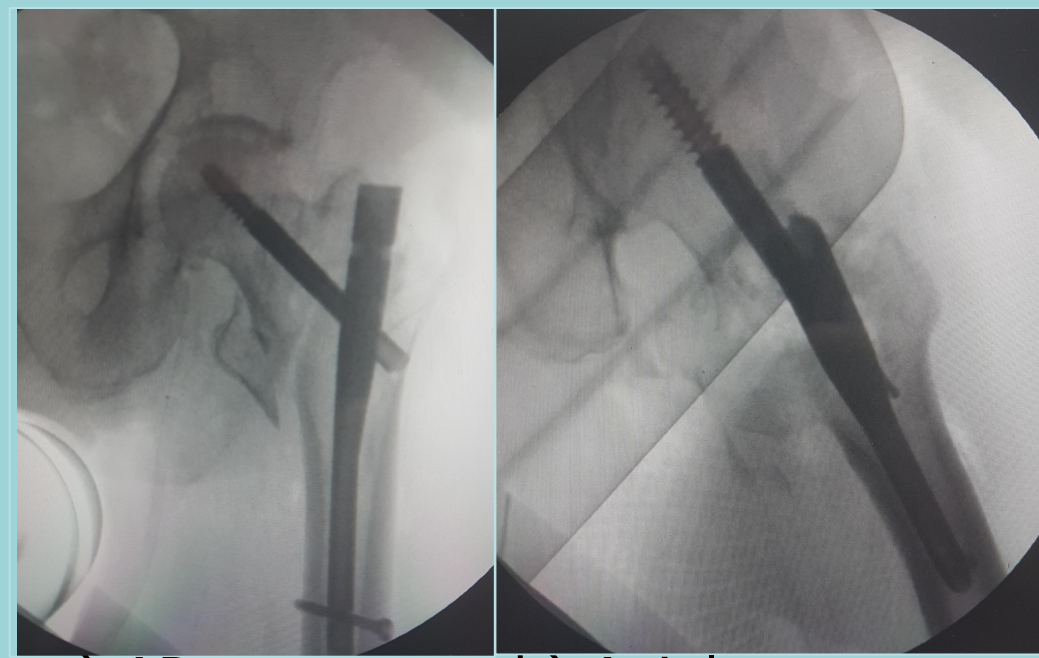


Fig. 2 MSCT angiography
* hematoma



a) AP b) Axial
Fig. 1 Intramedullary gamma nail



Fig. 5 ← dislocated bone fragment; * extensive hematoma
x lesion of the common femoral artery

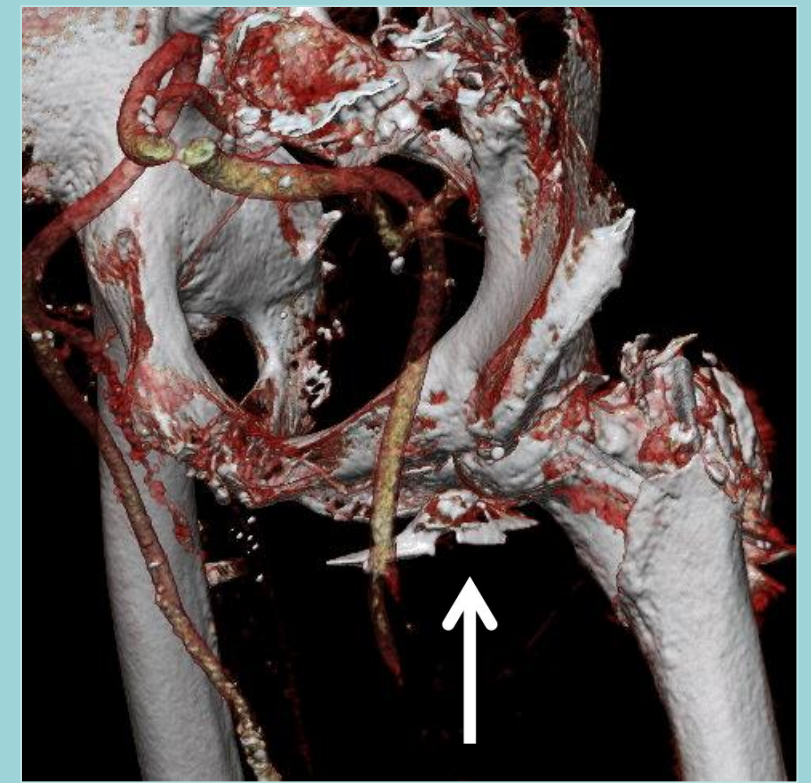


Fig. 4 dislocated bone fragment

CASE REPORT

- A 82-years old male was admitted with a **low-energy pertrochanteric fracture** of the left hip. **Intramedullary osteosynthesis with gamma nail** (Fig. 1) followed the urgent preoperative treatment. Clinical findings showed no possible vascular injury, intraoperatively.
- The early postoperative course went without any noticeable vascular incident. Physical therapy started and the patient was verticalized. He was discharged on the seventh postoperative day with recommendations for further treatment.
- **After three weeks,** the patient was hospitalized in cardiology for verified **deep vein thrombosis and angina pectoris.** Then a **hematoma of the left femoral** region was found as **an incidental ultrasound finding.** The patient denied any repeated trauma to the left leg. He performed physical therapy in bed and walked with the walker device.
- He was transferred to department for **surgical incision and evacuation.** After three weeks, **MSCT angiography** (Fig. 2) was done due to spontaneous bleeding from a recurrent hematoma (Fig. 3). **A dislocated bone fragment** (Fig. 4) was found ventral to the head of the femur and **extensive hematoma** along the ventral part of the proximal edge of the femur, respectively (Fig. 5). **Lesion of the common femoral artery** was repaired with **sutures,** and the hematoma was evacuated.