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FROM BULL GORE TO ACUTE KIDNEY INJURY THROUGH ALL THE COMPLICATIONS. HOW VASCULAR INJURY MAY CAUSE COMPARTMENT SYNDROME AND LEAD TO AMPUTATION AND NEED OF DIALYSES

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Rationale. The most common sites of bull gore injuries include abdomen, perineal region, groins and thighs. This specific kind of injury may result in serious damage to a victim's body, including arteries, veins and nerves disruption. Vascular injury, accompanied by a massive blood loss, may lead to significant lower limb ischaemia and following complications.

Objective: to present a case report describing how a bull gore injury may lead to multiple consequences.

Material and methods. Our patient was a 44 year old man, who was brought by helicopter to the Vascular Surgery Department with an open injury of his left thigh after he had been attacked by a bull.

Results and discussion. Examination revealed laceration over the left thigh. The abdomen was soft with slight tenderness and guarding. Negative peritoneal symptoms. Left lower extremity was colder and paler compared to the contralateral limb. The pulse was undetectable distally from the left groin. Angio-CT revealed left femoral artery, vein and nerve injury. Immediate surgical revision of the left groin was performed in order to restore proper blood flow. Within a few hours post-operatively the patient developed symptoms of a compartment syndrome. Medial and anterior fasciotomy was performed. During following days increasing renal failure was observed. The patient was passed to the ICU for dialysotherapy, where he spent 19 days. After coming back to the Vascular Surgery Clinic, there was persistent bleeding from the wounds and developing necrosis of area around wounds and toes of the left foot. The patient underwent two surgeries to excise necrotic tissues followed by use of AQUACEL and VAC-therapy. The bleeding was stopped and satisfactory blood supply to the left foot was achieved. After total of 32 days of hospitalization the patient was discharged and passed to a general surgery ward in other hospital. In the follow-up period the patient had to have his lower extremity amputated above the knee.

Conclusions. An injury to main blood vessels may cause massive blood loss and limb ischaemia. In this patient it was enhanced by posttraumatic compartment syndrome. Ischaemia that lasts at least 4 hours lead to significant rhabdomyolysis and myoglobinuria. When accompanied by hypovolemia it may lead to acute kidney injury. In case of peripheral vessel injuries it is extremely important to perform following actions: stabilize the extremity, control blood loss with direct pressure, when not effective – apply a tourniquet above the wound, correct hypovolemia, monitor vital signs.