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IMAGING IN INTENSIVE CARE MEDICINE

Unusual *purpura fulminans* after heart transplantation

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A 43-year-old man with a history of multiple myeloma and recent cardiac amyloidosis was admitted to ICU for cardiogenic shock requiring veno-arterial extracorporeal membrane oxygenation (VA-ECMO). After heart transplantation, VA-ECMO was necessary for primary graft dysfunction, and an immunosuppresive therapy was started (antilymphocyte globulin, tacrolimus, mycophenolate mofetil and steroids). Four days after transplantation, he developed septic shock. Clinical examination was remarkable for purpuric lesions of the left lower limb, evolving toward confluent purpura (Fig. 1). There was no sign of necrotizing soft tissue infection. Platelet count was always superior to 100 G/L, and no hemostasis disorder was associated. Empiric antimicrobial therapy with vancomycine/piperacillin-tazobactam was adapted to cefotaxime when blood cultures and skin samples were positive to *Escherichia coli*. Surgical excisions–debridments were performed 3 weeks after the appearance of the purpura. Despite favorable cutaneous evolution, several major infectious and hemorrhagic complications led to death after a 3-month ICU stay. As *E. coli*-related *purpura fulminans* is exceptional, the genome of the strain was fully sequenced; the strain belonged to the phylogroupe B1, exhibiting a ST75 sequence type and a O112-H8 serotype. Several virulence factors, previously associated with extra-intestinal pathogenicity, were identified [sfa/foc, iucC (aerobactin), iss, ompT, hlyF, iroN (salmochellin), papGIII].

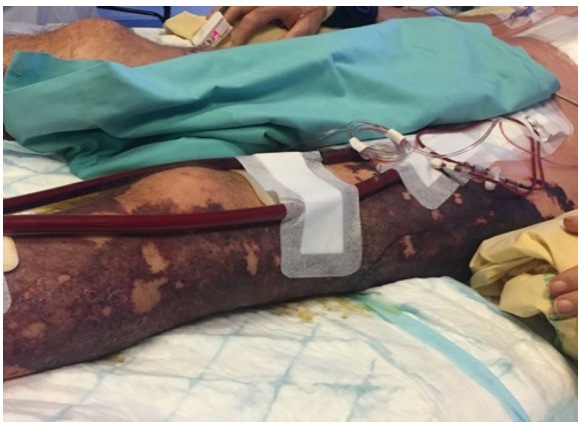

Fig. 1 Confluent purpura of the left leg, 1 day after the onset of septic shock

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Compliance with ethical standards

Conflicts of interest
On behalf of all authors, the corresponding author states that there is no conflict of interest.

Informed consent
Informed consent was obtained from the patient's next of kin.

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