Shock, aortic occlusion and creamy plasma

Cécile Armougom MD a, Hayate Chraka MD a,c, Boris Boulanger MD a, Jean Sénémaud MD b,c, Olivier Langeron MD PhD a,c, Nicolas Mongardon MD PhD a,c,d,*

a Service d’anesthésie-réanimation chirurgicale, unité d’anesthésie-réanimation chirurgicale cardio-vasculaire, DHU A-TVB, Assistance Publique des Hôpitaux de Paris, Centre Hospitalier Universitaire Henri Mondor, Créteil, France
b Service de chirurgie vasculaire, Assistance Publique des Hôpitaux de Paris, Centre Hospitalier Universitaire Henri Mondor, Créteil, France
c Université Paris Est, Faculté de Médecine, Créteil, France
d Inserm, U955, Equipe 3 “Stratégies pharmacologiques et thérapeutiques expérimentales des insuffisances cardiaques et coronaires”, Institut Mondor de Recherche Biomédicale, Université Paris Est Créteil, Créteil, France

Acute occlusion of the abdominal aorta is an extremely rare disease. A 31-year-old man with history of neuroblastoma of the left adrenal gland in childhood treated with radiotherapy, chemotherapy and surgery was known to have secondary arterial hypertension due to renal artery stenosis. He also had poor alimentary habits with excessive alcohol and massive sugar consumption. He presented to hospital for acute bilateral limb ischemia with complete paralysis. Abdominal CT-scan revealed abdominal aortic occlusion below the renal arteries, associated with severe pancreatitis (plasma lipase = 1459 UI/l) (Fig. 1). Post-operative management of emergent axillobifemoral bypass was complicated with severe distributive shock. Venous puncture for central line insertion retrieved blood that immediately presented with a creamy layer at the top of the syringe (Fig. 2). Major hypertriglyceridemia at admission (34.5 mmol/l) decreased to 6.2 mmol/l after a single plasmapheresis session on post-operative day 1. Severe acute respiratory distress and multi-organ failure led to death on post-operative day 21. Hyperviscous blood likely promoted aortic thrombosis in the setting of radiation-induced aortitis.

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

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