A CASE REPORT OF AKY DUE TO ACUTE AORTIC DISSECTION: CRRT ROLE

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Object: Post-surgical acute renal failure (AKI) (especially in cardiac surgery) is one of the most frequent clinical pictures in hospital setting, characterized by severe haemodynamic instability and rapid worsening of renal function, complicated at worst, by oligoanuria with need for cardiovascular support and hemodialysis replacement therapy in CRRT modality.

Method: A 55-year-old man came to the emergency room for chest pain with interscapular irradiation. Blood chemistry tests did not show any noteworthy anomaly, as well as ECG, Echocardiogram , Chest X-ray. Thoraco-abdominal CT, anyway highlighted a Stanford type A aortic dissection. The patient was therefore subjected to emergency cardiac surgery, which was then complicated by a new acute intraoperative dissection with subsequent prosthetic replacement of the aortic valve. Furthermore, due to the ongoing disconnection of the CEC in progress, percutaneous femoro-femoral ECMO V / A was implanted . In the following days, moreover, aortic counter-pulsator (IABP) was implanted and, due to the onset of anuria despite the maximum-dose diuretic infusion therapy, CRRT hemodialysis treatment was started in CVVHDF mode after positioning a right jugular CVC (CVVHDF parameters: QB 150-200 ml / min, QD 2000 ml / h, Reinfused flow equal to 1500 ml / h with weight loss of about 100 ml / h using sodium heparin remodulated according to ACT as anticoagulant).
The patient, intubated, connected to MV, in ECMO V / A, sedated, haemodynamically unstable despite the infusion of Noradrenaline 0.20 mcg / Kg / min and Adrenaline 0.02 mcg / Kg / min, was subjected in the following days to serial CVVHDF treatments and continuous diuretic therapy with Furosemide at 4 ml / h.

Conclusions: After six treatments in CVVHDF, there was a progressive improvement of clinical conditions and of blood test analysis (creatinine 1.49 mg / dl, nitrogen 76 mg / dl with serum electrolytes and acid-base balance within normal ranges) with resumption of diuresis and vital parameters, until discontinuation of treatment in CRRT mode and gradual discontinuation of inotropic drugs.