From 2001 to 2010 we treated in our centre 87 patients in septic shock with CPFA. CPFA, combining a centrifugal plasma filter and adsorption column, proved to be an effective treatment of septic shock patients with or without acute kidney injury (AKI), improving the hemodynamic, the blood chemistry data and the survival. The majority of patients in ICU most patients are at risk of bleeding due to recent surgery or the presence of abnormal coagulation context, particularly in septic shock patients. Aim of this study was to elaborate and evaluate an citrate anticoagulation protocol.

**Materials & Methods**

From 01/12/2009 to 31/12/2010 we treated with CPFA 7 consecutive mechanical ventilated patients, 3 males and 4 females (mean age 61.6 ± 11.2 years), with septic shock and multiorgan dysfunction (MODS). 30 ± 4 days spent in intensive care unit 30 ± 16 (Table 1). We observed all the inclusion criteria of Conger study (ClinicalTrials.gov-Protocol: NCT00133721) of 30 critically ill patients with CPFA-CVVH (prevented 50 ml/h, perfused at 6.5 L/min, plasma filtration 30 ml/min, 1% citrate on predilution plasma bag (Table 1). All biochemical data were collected and analyzed at the beginning of treatment to monitor the performance of different parameters.

**Clinical Evaluation**

We performed 50 treatments accounting for 432 hrs, mean duration 8.6 ± 1.6 hrs, mean plasma volume of 10.6 ± 2.4 L, Qb 142 ± 28 ml/min. Qp 6 ± 2.2 ml/min, a treated plasma during body weight of 0.28 ± 0.34 L/kg. Mean CaCl2, 10 mmol/L, Citrate 10 mmol/L, Citric acid 2 mmol/L, on predilution citrate bag (Table 1). As a result of citrate anticoagulation protocol, we observed the convective dose was less than 20 ml/Kg/h.

**Discussion**

The protocol in use in our centre allowed us to achieve an elevated dose of plasma filter patients with a circuit life longer than other anticoagulation methods. We observed an extended survival at 28 and 90 days related to clinical status of patients (85.7% and 71.5%, respectively; Table 6). We observed that the convective dose was less than 20 ml/Kg/h. When combining the treatment the modulation was enough effective in the cytokines removal. Furthermore, we guarantee in each treatment a minimal convective dose of 20 ml/Kg/h.

**References**