

Abstract:

The present study was designed to evaluate the effect of early administration of hypertonic saline on adequacy of resuscitation, progression of inflammation and outcome of critically ill septic patients.

The result of the study showed that HTS 7.5% has prophylactic role in progression of inflammation in septic patients as HTS 7.5% 4ml/kg infusion lead to significant reduction in laboratory parameters of inflammation (CRP, WBCs and $\text{TNF}\alpha$) with significant improvement of tachycardia and tachypnea induced by sepsis and reduction of occurrence of metabolic acidosis, so HTS infusion lead to improvement of outcome of critically ill septic patient according to occurrence of septic shock, need for mechanical ventilation, ICU mortality and the mean ICU length of stay.

Keywords: Hypertonic saline, inflammation, critically- ill septic patients.