

Sepsis and septic shock remain major cause of mortality in non-coronary intensive care units. Prognosis of septic patients worsens further in case of concomitant acute kidney injury. Pathophysiological pathways leading to renal dysfunction in sepsis remain unclear despite of enormous experimental and clinical research. Similarly, the role of extracorporeal blood purification techniques as an adjunctive treatment in sepsis is highly controversial. The aim of our study was to dynamically assess renal haemodynamic, microvascular and metabolic responses in a porcine clinically relevant model of septic shock. The same experimental model was used in experiments elucidating potential benefit effects of two distinct haemopurification methods on different biological responses to infectious insult.