



Sepsis

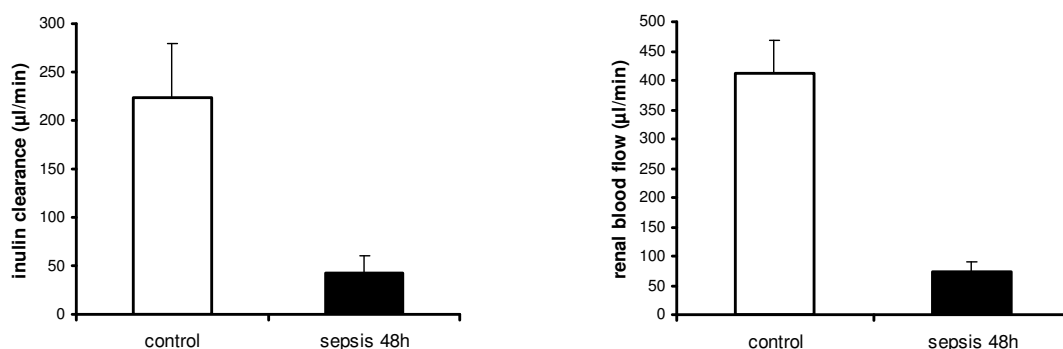
by Cecal Ligation and Puncture (CLP)

Scope of application

Sepsis oftentimes combined with acute renal failure is a severe medical problem. The mortality rate for septic patients with acute renal failure is approximately doubled compared to patients with sepsis alone and unfortunately, the treatment for sepsis-induced renal failure has advanced little during the last several decades.

Models

A stable model for sepsis is coecum ligation and puncture (CLP) which mimics the human situation where colon perforation is a common cause for sepsis. In this model renal function deteriorates within 48 hours after operation. Alternatively, sepsis can also be induced by lipopolysaccharide (LPS) injection (10-15 mg/kg ip).



Renal function (left) and renal blood flow decrease within 48h after CLP.