Challenges in dialysis in liver associated renal failure<br>Hartmut H J Schmidt<br>Universitätsklinikum Münster, Germany


#### Abstract

Hepatorenal syndrome (HRS) is defined as a potentially reversible kidney failure in patients with liver cirrhosis, acute liver failure or steatohepatitis. Currently, classification is in discussion. Due to its very high short-term mortality, HRS is a life-threatening condition that has to be diagnosed and treated rapidly in order to improve the patient's clinical outcome. The pathogenesis of HRS comprises portal hypertension with impaired kidney perfusion by vasoconstrictory endogenous mediators (including vasopressin, noradrenalin and renin / angiotensin), leading to oliguria, very low renal sodium excretion ( $<10 \mathrm{mmol} / \mathrm{l}$ ) and water retention. Further diagnostic criteria include but are not restricted to creatinine serum concentrations rising above $1.5 \mathrm{mg} / \mathrm{dL}$ and clinical exclusion of other causes of acute kidney failure, structural kidney disease, shock, dehydration, and nephrotoxic medication. Systemic infections are potentially predisposing causes in some patients with HRS. Among the different therapies available, there is a discussion on different therapeutic approaches, the timing of dialysis and the type of dialysis. Since there is little information in the literature in respect to superiority of different dialysis methods, the concepts of hemodialysis versus albumin dialysis will be compared. Furthermore, among different variables blood pressure and coagulation as important factors will be discussed.


## Biography

Hartmut H J Schmidt has completed his MD from Medical University of Hannover in Germany. He received Post-doctoral training in Gastroenterology at Medical University of Hannover, NIH (Bethesda), Charité (Berlin) and Universitätsklinikum Münster. Since 2010, he serves as Director of Klinik für Transplantations medizin at Universitätsklinikum Münster. He has published more than 125 original articles.

