

【Symposium 1-2】

CVVHD with RCA: What is the Evidence?

Tao-Min Huang

台大醫院 腎臟科

Continuous venovenous hemodialysis (CVVHD) and continuous venovenous hemofiltration (CVVH) are two primary modalities in renal replacement therapy for critically ill patients, distinguished by their mechanisms of toxin removal. CVVHD, utilizing diffusion, is optimal for small molecule clearance and operates at lower flow rates, ensuring better hemodynamic stability and offering longer circuit lives. CVVH, employing convection, achieves better middle-molecule clearance but requires higher flow rates, increasing the risk of fluid imbalance. Practically, the traditional distinction between small and middle molecule clearance is less applicable with Middle Cut-Off (MCO) filters, which, while showing no significant impact on patient outcomes, significantly enhance circuit lifespan. Regional citrate anticoagulation (RCA) is the preferred anticoagulation method in CVVHD and CVVH, effectively minimizing clotting risk and systemic anticoagulation-related complications. The choice between CVVHD and CVVH should be based on the patient's pathophysiological needs and therapeutic goals. Further studies are warranted to assess the specific clinical benefits of these modalities in various scenarios to optimize dialysis outcomes for critically ill patients.

Keywords: Continuous Venovenous Hemodialysis (CVVHD) 、 Continuous Venovenous Hemofiltration (CVVH) 、 Regional Citrate Anticoagulation (RCA)

