

AKI treatment: When should we start CRRT?

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Acute kidney injury (AKI) is a common and serious complication in critically ill patients. The presence of AKI has a poor prognostic impact on morbidity and mortality in these patients, increasing the mortality rate to approximately 60 to 80%. For more than a decade, continuous renal replacement therapy (CRRT) is an established mainstay treatment modality for AKI patients in intensive care units in the context of its advantage in maintaining hemodynamic stability through slow continuous ultrafiltration. Although AKI is associated with increased mortality, timely initiation of CRRT may improve clinical outcome. In this regard, recent large-scale observational cohort studies and randomized clinical trials have proposed optimal timing of CRRT. Nevertheless, there has been considerable variability and inconsistency in the results of trials, thereby resulting in failure to bridge the gap between clinical trials and clinical practice. This lecture will focus on the timing of CRRT based on recent large scale clinical trials and provide practical algorithm for initiation of CRRT in critically ill patients.