

#LIVES2023: Initiation of CRRT versus IHD



In critically ill patients with acute kidney injury (AKI), renal replacement therapy (RRT) is often necessary. The choice of RRT modality, such as intermittent haemodialysis (IHD) or continuous renal replacement therapy (CRRT), has been a subject of debate. IHD involves shorter, more frequent sessions, while CRRT is continuous and slower. CRRT is generally preferred for haemodynamically unstable patients, while IHD is used for stable patients with specific conditions. Previous guidelines recommended CRRT for unstable patients, but clinical evidence has been inconclusive due to small trials and methodological issues. Uncertainty remains regarding the best RRT modality.

A secondary analysis of the STandard versus Accelerated Renal Replacement Therapy in Acute Kidney Injury (STARRT-AKI) trial was conducted to compare the outcomes of patients who started RRT using CRRT or IHD. Researchers used propensity scores and inverse probability of treatment with overlap-weighting to account for initial group differences. The primary outcome of the study was a composite of death or RRT dependence 90 days after randomisation.

The study included 1590 patients who initially received CRRT and 606 patients who received IHD. The composite outcome of death or RRT dependence at 90 days was seen in 51.8% of patients in the CRRT group and 54.3% of patients in the IHD group. After adjusting for baseline differences with overlap weighting, initial use of CRRT was associated with a lower risk of death or RRT dependence at 90 days compared to initial use of IHD. This difference was mainly due to a reduced risk of RRT dependence at 90 days.

These findings show that for critically ill patients with severe AKI, initiation of CRRT compared to IHD was associated with a significant reduction in the composite outcome of death or RRT dependence at the 90-day mark.

Source: [Intensive Care Medicine](#)

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