**REGIONAL CITRATE ANTICOAGULATION COMPARED WITH NO HEPARIN IN CONTINUOUS KIDNEY REPLACEMENT THERAPY AMONG LIVER PATIENTS: A SINGLE CENTER, RETROSPECTIVE, INTER-RIM ANALYSIS.**

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**ABSTRACT**

**Introduction**: There is scant data from emerging nations with respect to protocols and outcomes of continuous kidney replacement therapy (CKRT) in liver patients. We divided the study population into chronic liver disease (CLD), and acute liver failure (ALF) or acute on chronic liver failure (ACLF) and compared the outcomes of RCA with no heparin.

**Objective:** Improvement in dialysis therapy in patients with ACLF requiring hemodialysis

**Methods:** This was an ethically approved, retrospective, single-center study conducted between 10 July 2022 to 26 Sept 2023. The study population (n = 309) was divided into groups of CLD (n =173), ALF (n = 62) and ACLF (n = 74). CVVHDF modality was used where citrate dosing of 3 mmol/L maintaining a range of 2 mmol/L to 2.4 mmol/L was used. The primary outcome measured was difference in filter life span. Secondary outcomes were ammonia, lactate and pH improvement.

**Results**: Overall 309 patients were studied. Of 173 CLD patients, 44 received RCA and 129 received no anticoagulation. The median age of CLD was 50(40-57) years. In the Kaplan Meier analysis, RCA group had longer filter clotting time compared to no anticoagulation (log rank p-test = 0.001172). The length of stay from hospital admission to last follow-up or death was 11(6-18) days. Overall there was no difference in mortality between the groups with respect to choice of anticoagulation.

**Conclusion**: CKRT at low dose RCA is feasible in liver patients including ALF and ACLF. There were no additional metabolic complications or mortality risks associated with RCA.

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