**ULTRAFILTRATION VS PHARMACOLOGICAL DIURESIS IN HEART FAILURE: A META-ANALYSIS**

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*Introduction*: The role of ultrafiltration (UF) in acute decompensated heart failure (ADHF) has been a topic of debate and discussion. Multiple randomized control trials (RCT) have been done to compare UF versus pharmacological diuresis in this setting. Since the results of these studies have provided conflicting evidence, we performed a meta-analysis to consolidate the evidence.

*Methods*: Systematic review of PUBMED and COCHRANE database was performed for RCTs comparing UF with pharmacological diuresis in ADHF. We then performed a meta-analysis to explore the impact on weight change, rehospitalisation and mortality. Mantel-Haenszel odds ratio (OR) was calculated for dichotomous data and weighted mean difference (WMD) was calculated for continuous data.

*Results*: 7 RCTS with a total of 771 patients were included in our analysis. Weight loss was significantly higher in the UF group with WMD of 1.35(95% CI 0.49-2.21, p<0.01). UF group also had lower heart failure rehospitalisation rate, OR 0.60(95% CI 0.37-0.98, p=0.04). There was no difference in mortality between the two groups, OR 1.03(95% CI 0.68-1.57, p=0.89).

*Conclusion*: As compared to pharmacological diuresis, the use of UF is able to achieve more weight loss and also improve heart failure rehospitalisation in ADHF patients, without any significant change in mortality.

