Failure to reach target blood pressure is related to fluid overload in CKD patients treated for Hypertension

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POSTER

One of the hallmarks of hypertension treatment is the manipulation of the extracellular fluid volume using diuretics. Diuretics can decrease blood pressure, particularly in salt sensitive hypertension. Diuretics can also sensitize the patient to other antihypertensive therapies, mostly in angiotensinconverting enzyme inhibitor (ACEi) treatment. Curiously, the fluid status of treated hypertensive patients has hardly been investigated. Our research characterized extracellular fluid volume in patients with treated hypertension and related that to clinical characteristics such as edema, actual blood pressure, and signs of fluid overload. Fluid volume assessment was done by multifrequency bioimpedance measurements using the 'Body Composition Monitor'. Our results suggest that fluid overload is associated with hypertension that is not treated to target. Fluid overload is also associated with other clinical and iatric characteristics. As such, this study helped form a first step towards an extracellular fluid volume guided treatment of hypertension.