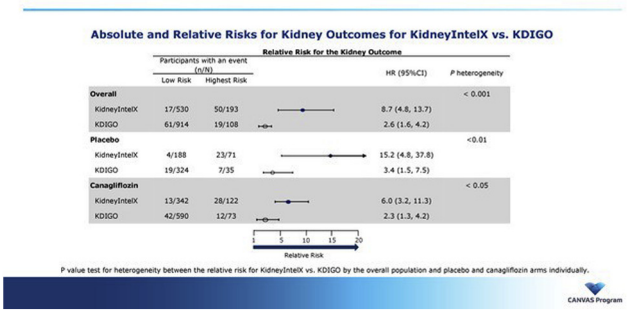
median uACR 56 mg/g). During a mean follow-up of 5.6 years, 131 (9.9%) of this subgroup with baseline DKD experienced the composite kidney outcome. KDIGO categorization based on eGFR and uACR stratified 69%, 23% and 8% of the DKD population into "moderately increased risk," "high risk," and "very high risk," with event rates of 7%, 17%, and 18% (relative risk [RR] of 2.3, 95% CI 1.3-4.2 for the "very high risk" vs. "moderately high risk" in the treatment arm and RR of 3.4, 95% CI 1.5-7.5 in the placebo arm). Using risk cutoffs from prior validation studies, KidneyIntelX stratified patients to low (40%), intermediate (45%), and high risk (15%) strata with event rates of 3%, 10%, and 26% (RR of 6.0 , 95% CI 3.2-11.3 for the high vs. low risk groups in the treatment arm and RR 15.2, 95% CI 4.8-37.8 in the placebo arm) (Figure). The treatment effects of canagliflozin vs. placebo varied by baseline strata of KidneyIntelX. In the low risk stratum, the RR was 1.65 (95% CI 0.54-5.08), in the intermediate stratum the RR was 0.59 (95% CI 0.36-0.98), and in the high-risk stratum the RR was 0.67 (95% CI 0.38-1.18). In the high-risk stratum, the absolute risk reduction (ARR) for canagliflozin vs. placebo for the composite kidney outcome was 8% vs. an ARR of 2.6% in the overall DKD population.



Conclusions: KidneyIntelX successfully risk-stratified a large multinational external cohort for risk of progression of DKD, with larger differences in observed events across KidneyIntelX risk strata compared to KDIGO risk strata. Moreover, individuals scored as high risk by KidneyIntelX have the potential to achieve greater absolute risk reductions for the outcome with canagliflozin treatment compared to non-stratified DKD participants.

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IMPORTANCE OF SERUM ALDOSTERONE ON CHRONIC KIDNEY DISEASE OF UNCERTAIN AETIOLOGY IN SRI LANKA

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Introduction: The Chronic Kidney Disease of uncertain aetiology (CKDu), a recently described tubular interstitial nephropathy, is prevalent in tropical or subtropical countries including pockets in the farming dry zone of Sri Lanka, India, Nicaragua, Costa Rica, Egypt, and Tunisia. There is growing evidence to suggest that hot weather and recurrent dehydration is at least, indirectly contributing to the onset and progression of CKDu. Hence, the Renin-Angiotensin-Aldosterone system (RAAS) is protective against AKI in CKDu. RAAS inhibitors retard the progression of Chronic Kidney Disease (CKD) shown to be increased mortality and hospitalization in CKD of the elderly. In this background, our aim is to investigate the degree of activation of RAAS in the light of serum Aldosterone in CKDu Sri Lanka.

Methods: All definite CKDu cases (119: male 97, female 22) in two renal clinics in endemic areas were enrolled after informed written consent. A structured questionnaire was used to collect demographic and medical information. Collected Blood and urine samples were analyzed for routine biochemical parameters and proteinuria. All analyses were performed in IBM SPSS statistics version 23. Pearsons' correlation was used to measure the correlation between the parameters.

Results: Most of the patients (72.3%) were between, 40 to 60 years. The majority of the patients were male (81.5%). In the sample, 54.6% of patients were in the early stage (stage 1, 2, 3a) while 45.4% were in the late stage (stage 3b, 4, 5). About 33.3% had blood pressure within normal range while 86.3% of them noted to have normal diastolic blood pressure. Moreover, the majority of the patients (73.9%) were reported with the absence of proteinuria. Among the study subjects, 39.5% were on Angiotensin-converting enzymes (ACE) inhibitors and 10.1% of them were on Angiotensin receptor blockers (ARBs). Only 4.2% had shown coronary artery disease. Among the clinical characteristics, the average values of serum creatinine, serum osmolality were increased than the reference range. Only 4.4% and 6.7% of study subjects had increased serum levels of Aldosterone and Angiotensin II. About 49.1% of subjects had elevated serum osmolality but urinary osmolality was increased only in 1.7%. According to the Pearson correlation of biochemical investigations with serum Aldosterone, serum Aldosterone was significantly positively correlated with serum creatinine ($r=0.477$, $p<0.01$), Angiotensin II ($r=0.379$, $p<0.01$), potassium($r=0.230$, $p=0.014$), and urea ($r=-0.287$, $p=0.002$) while it was significantly negatively correlated with eGFR ($r=-0.353$, $p<0.01$), calcium ($r=-0.342$, $p<0.01$), bicarbonate ($r=-0.252$, $p=0.007$) and Hemoglobin ($r=-0.287$, $p=0.002$). According to the independent-sample median test, serum Aldosterone was significantly different with the stages of CKDu ($p=0.044$), early & late stages ($p=0.024$), and proteinuria ($p=0032$).

Conclusions: In the current study, in cross sectional model, there was no obvious activation of RAAS. However, with the progression of the disease, serum Aldosterone was increased. Our findings confirm that there are no obvious indications for RAAS inhibitors at least in early stages of CKDu.

No conflict of interest

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ESTIMATED GLOMERULAR FILTRATION RATE EQUATIONS: DO WE NEED TO USE THE ETHNICITY CORRECTION FACTOR IN PEOPLE OF AFRICAN ANCESTRY OUTSIDE OF THE USA?

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