

OP033

Is there a significant, seasonal variation when patients in the CKDU endemic regions present for the first time with symptoms and renal dysfunction?

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Introduction and objectives: Physicians have observed a seasonal variation when patients from CKDu endemic regions present with acute ill-health for the first time with renal dysfunction. We have previously reported an interstitial nephritis in these patients along with evidence of past injury. Objective was to investigate a statistical significance in the seasonal variation observed.

Method: Symptomatic patients aged >20 years with two elevated serum creatinine reports, presenting first time from the CKDu endemic regions were included. The agricultural season of presentation as Yala, Maha and inter-monsoonal was recorded. Biochemical profile was done. Normal sized kidneys were biopsied. Pathology other than interstitial nephritis was excluded after biopsy. The salient six renal lesions were scored 0, 1, 2, if up to 30%, 30-60% and >60% of the renal area was affected, respectively; and scored 3, if there was no lesion. The disease Activity Index (AI) and Chronicity Index (CI) were scored with a maximum of 6 and 12 scores, respectively.

Results: 15(25.4%), 10(16.9%) and 34(57.6%) patients were presented in 1st inter-monsoon, 'Maha' and 'Yala' seasons, respectively. Yala presentation was statistically significant (p=0.001). There was no statistically significant difference found in proteinuria, leucocyturia, total leucocyte counts and the activity and chronicity histological scores in the different seasons. 36.6% of patients presenting in the Yala season had microscopic hematuria (p=0.034).

Conclusion: There appears to be a seasonal variation in the occurrence of acute symptoms and renal dysfunction in patients presenting first time from CKDu endemic regions. The significant hematuria found in the dry humid Yala season merits further investigation.