

Prevalence of Microalbuminuria in Rheumatoid Arthritis Patients Attending the Rheumatology and Rehabilitation Clinic at National Hospital, Sri Lanka

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Rheumatoid Arthritis (RA) is an autoimmune disorder that affects multiple synovial joints leading to bone and cartilage destruction. RA is associated with many co-morbidities. Sub-clinical renal dysfunction is one such complication that remains silent during the disease course. Therefore, the study was aimed to investigate the prevalence of microalbuminuria in RA patients and to determine the correlation of microalbuminuria with ESR and CRP which are considered biomarkers of RA. Fifty confirmed RA patients according to ACR EULAR criteria including both positives and negatives with or without deformities were selected from the Rheumatology and Rehabilitation Clinic of NHSL within 2 months period. The subjects did not have any clinical history of kidney diseases, diabetes mellitus, and hypertension. Socio-demographic data, medical and drug history were collected through an interviewer-based questionnaire while urine microalbumin, ACR, ESR, CRP investigations were carried out. Collected data were analysed statistically using SPSS version 23. The prevalence of microalbuminuria in the selected study population was 40%. Significant correlations were reported between microalbumin and CRP; ACR and CRP ($P<0.01$) among elderly RA patients. Furthermore, there was a significant difference between the mean microalbumin and ACR values of RF positive and RF negative groups of the study population ($P<0.05$). A significant correlation between ACR and disease duration ($P<0.05$) was also observed. Therefore, it can be concluded that microalbuminuria and ACR together can be used as markers to detect early renal dysfunction related to RA and thus, morbidity and mortality among RA patients can be minimized.

Keywords: *rheumatoid arthritis (RA), microalbuminuria, albumin to creatinine ratio (ACR).*