Microalbuminuria in patients with rheumatoid arthritis

Hanaa Mohamed Rady Nagy, Fawkia Mohamed Most, Nadida Abdel Hamied Gohar, Hala Abdel Monem Nasar,

Cairo University
Giza, Egypt

Doctorial (PhD) Thesis, 2001

Abstract

Objectives: We examined the prevalence of microalbuminuria in patients with rheumatoid arthritis (RA) and the correlation between microalbuminuria and disease activity and treatment with antirheumatic drugs.

Methods: Urinary albumin was assayed by the radioimmunoassay technique in random urine samples of 60 RA patients divided into 3 groups according to the medication they were receiving and 20 apparently healthy controls of matching age and sex and the results were expressed as urinary Albumin:creatinine ratio (A:C ratio) for standardization of urine concentration.

Results: Microalbuminuria was detected in 13 RA patients (21.6%) compared to 1 in the control group (5%). The difference did not reach statistical significance but the mean A:C ratio was significantly higher in RA patients than the control group. The prevalence of microalbuminuria and the mean A:C ratio were significantly higher in group II patients who were treated by gold and NSAIDs. The mean index of disease activity (IDA) and the mean grade of disease activity (MGDA) were significantly higher in RA patients having microalbuminuria compared to those who have not.

Conclusion: Screening for renal disease in RA patients should not only include serum creatinine measurement and routine urine analysis but also the use of the more sensitive immunochemical methods for urinary-albumin measurement that can detect early subclinical renal dysfunction and drug induced renal damage. The results of this study can not support the use of microalbuminuria as an indicator of disease activity in RA patients.

Keywords
Rheumatoid Arthritis, Microalbuminuria, Nephropathy, Gold, Methotrexate,