



ANNUAL GLOMERULAR FILTRATION RATE LOSS AMONG LUPUS PATIENTS IS HIGHER THAN EXPECTED

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BACKGROUND

Renal involvement in Systemic Lupus Erythematosus (SLE) occurs clinically in about 60% of patients and can determine tubular, interstitial, vascular and glomerular changes. Up to 10 percent of patients with lupus nephritis develop end-stage renal disease, and patients with lupus nephritis (LN) have a higher mortality than SLE patients without lupus nephritis. In the general population the loss of renal function is about 1 mL/min/year and the rapid progression is defined, by KDIGO, as a sustained decline in eGFR of more than 5 mL/min/1.73m²/year. However, for patients with SLE there is no data about the rate of renal function loss. The main objective of the present study is to determine the rate of GFR decline in patients with LN in comparison to those without nephritis.

MATERIALS AND METHODS

We present a small scale pilot study to propose an analysis of the rate of loss of renal function in patients with SLE. During the first half of 2019, an amount of medical records of patients with lupus were analyzed, accompanied at the university hospital. A retrospective analysis was performed. A retrospective analysis was developed comparing patients with and without nephritis; creatinine clearance (calculated by the CKD-EPI method), rate of renal function loss among patients with nephritis. The creatinine measurements were taken as follows: a mean of three consecutive serum creatinine dosages were performed at 2 times of outpatient follow-up, with patients with stable disease or remission.

RESULTS

Sixty eight patients (64 females) were studied, 27 of whom had LN, mostly proliferative glomerulonephritis. Mean age at the time data was collected were 44 (+13) and 35 (+13) years for those without and with LN respectively. The median time of disease was 13 years for the whole group. The mean annual glomerular filtration rate loss was 4.6 (+ 3.4) mL/min for the patients with lupus nephritis in comparison to 0.5 (+ 3.6) mL/min.

CONCLUSION

We found a high speed of renal function loss among lupus nephritis patients whose disease was in maintenance phase and supposedly stable. The loss of renal function in patients with lupus nephritis is a main concern in the management of patients with SLE. The annual GFR loss has not been deeply studied and may be higher than expected for other renal diseases.