DESPITE THE HIGH RATE OF RESPONSE TO TREATMENT, LUPUS NEPHRITIS STANDARD OF CARE IS STILL ASSOCIATED WITH HIGH INCIDENCE OF CHRONIC KIDNEY DISEASE: A RETROSPECTIVE LONGITUDINAL STUDY, FROM THREE SOUTH-EUROPEAN COHORTS OF PATIENTS IN FOLLOW-UP SINCE 2000

Background One of the most important complications of lupus nephritis (LN) is the chronic kidney disease (CKD) development.

Methods Multicenter retrospective observational study of SLE patients (ACR97) with biopsy proven LN attending to three South European Rheumatology departments in the last two decades. Variables: demographics; SLE-related, including global activity (SLEDAI-2K), renal flares, therapies, ACR response criteria and CKD. Statistical analysis: bivariate and multivariate analysis exploring factors associated to CKD. ROC curves and area under the curve were calculated to test each proteinuria level as predictor of long-term renal outcome.

Results Seventy-six patients were included, mean age: 33 years; mean disease duration: 14 years; mean follow-up (since LN diagnosis): 8.5 years. LN class III, IV and V were present in 22%, 75% and 3% of the cases, respectively. Cyclophosphamide was the most used treatment to induce remission (55%). At 3, 6 and 12th months, the mean proteinuria was 2.3 g/24h, 1.53 g/24h, 1.1 g/24h, respectively (p<0.001). Fifty-five (77.5%) achieved complete response and 61 (84.7%) maintained remission.

In the logistic regression model, using genetic algorithms, we found that proteinuria at 6 months was significantly associated with CKD (OR:2.95; 95%CI 1.19,9.29, p=0.06, both). The optimal cut-off point of proteinuria at 6 months was 0.7 g/day, (sensitivity: 50%; specificity: 93%).

Conclusions A considerable percentage of LN developed CKD. Proteinuria at 6 months was associated with CKD. An absolute level of proteinuria below 0.7 g/day measured at 6 months is the best predictor of long-term renal outcomes.