EVALUATION OF RELAPSE RATE AND LIFE PROGNOSIS AFTER INDUCTION THERAPY IN PROLIFERATIVE AND MEMBRANOUS LUPUS NEPHRITIS

1Momoko Okamoto*, 2Kunihiro Ichinose, 3Keita Fujikawa, 4Yukitaka Ueki, 5Hideki Nakamura, 6Tomoki Origuchi, 5Atsushi Kawakami.

Funding Source(s): None

Background Systemic lupus erythematosus (SLE) is a complex autoimmune disorder with a broad spectrum of clinical and immunologic manifestations, among which lupus nephritis (LN) is the most common cause of morbidity and mortality. Here we evaluated the relapse rate and life prognosis after induction therapy in proliferative and membranous LN.

Methods One hundred fifty-one cases who underwent renal biopsy at our hospital and community hospitals from 1993 to 2016 were enrolled in this study. We retrospectively analyzed the complete response (CR) rate at 6 and 12 months after induction therapy and evaluated the predictive factors for CR, relapse rate and life prognosis in proliferative and membranous LN.

Results In 140 cases, we were able to examine the therapeutic response, relapse rate and life prognosis at 6 and 12 months after therapy was introduced. Most of the patients were female (84.3%). The median age at onset of LN was 34.0 years (interquartile range [IQR] 25.3-45.0 years), and the disease duration of SLE was 42 months (IQR 20.1-121.0 months). The median follow-up duration after renal biopsy was 96 months (IQR 44.0-168.0 months). The renal pathology of 99 (70.7%) patients was classified as ISN/RPS Class III or IV, and 41 (29.3%) patients were ISN/RPS Class V. Thirty-five patients (35.4%) in Class III or IV and 22 patients (53.7%) in Class V achieved CR at 12 months. Multivariate analysis showed that lower index of chronicity as assessed by the NIH histological scoring system in class III or IV and neutrophil infiltration in Class V were predictive factors for achieving CR at 12 months. Kaplan-Meier analysis showed that relapse rate and life prognosis were not different between proliferative and membranous LN.

Conclusions Our results suggested that the predictive factors for CR at 12 months after induction therapy were lower index of chronicity in class III or IV and neutrophil infiltration and CH50 in Class V. In general, proliferative LN is more immunologically active than membranous LN, however there were no difference in the achieving CR at 6 months.
and 12 months after induction therapy, the relapse-free period and life prognosis between proliferative and membranous LN. We need to closely follow up of therapeutic response and life prognosis of membrane LN as well as proliferative LN.

Funding Source(s): None

**Abstract 37**

**Association of smoking status and total and individual damage index in systemic lupus erythematosus**

*Romy Kallas*, 1Jessica Li, 1Michelle Petri. 1Johns Hopkins University; 2Johns Hopkins University School of Medicine

10.1136/lupus-2019-lsm.37

**Background** Smoking is a risk factor for systemic lupus erythematosus (SLE). It has been associated with increased disease activity and decreased effectiveness of hydroxychloroquine in cutaneous lupus. The objective of the study was to determine the association between smoking status and total and individual damage items in SLE.

**Methods** We analyzed data from the Hopkins Lupus Cohort. Damage was recorded using the Systemic Lupus Erythematosus International Collaborating Clinics/American College of Rheumatology (SLICC/ACR) Damage Index. Fishers exact test and Wilcoxon test were used in exploratory analysis. Logistic regression was used to estimate the association between damage and smoking status (ever/never). Odds ratios and 95% confidence intervals were reported. Stratification by ethnicity was done for individual damage items that were found to be significantly associated with smoking.

**Results** The prevalence of ever smokers in our cohort was 36%. SLE patients who ever smoked had higher odds of total damage with higher mean total damage index scores (p<0.0001). Data...