Background: Lupus podocytopathy is a recently recognised, new class of lupus nephritis (LN) characterised by diffuse foot process effacement (FPE) without capillary wall immune deposits and glomerular proliferation. However, the frequency, clinical features and treatment response of SLE and Sjögren syndrome (pSS) patients with LN-associated podocytopathy is unclear. Currently, elderly-onset pSS has been increasing, however, differences in clinical and serological features between young-onset and elderly-onset pSS is unclear.

Objectives: The aim of this study was to compare clinical and serological features between young-onset and elderly-onset patients with pSS.

Methods: All patients with pSS diagnosed with 2016 ACR/EULAR classification criteria at our department from 1995 to 2017 were included. Patients were divided into 2 groups according to the age of diagnosis at 65 years old; young-onset and elderly-onset. The symptoms and laboratory findings were compared.

Results: Six hundred twelve pSS patients were reviewed. Five hundred seventy (93%) were female. Four hundred twenty six (70%) were young-onset and the remaining 186 (30%) were elderly-onset. The mean age at pSS diagnosis was 47.8 and 72.4 years old, the ratio of women:men is around 12:1 and 20:1. The observation period from the diagnosis to the last visit was 3.46 and 5.50 years, respectively. At diagnosis, the positivity of anti-SS-A antibody (86.8 vs 73.7%, p<0.001), anti-SS-B antibody (48.3 vs 30.7%, p<0.001), and rheumatoid factor (49.6 vs 35.2%, p<0.01) were significantly higher in the young-onset patients than the elderly-onset patients. Also, the level of platelet cell count (23.0 vs 20.8*10^4/l, p<0.001), IgG (1996 vs 1745 mg/dl, p<0.001) and IgM (154 vs 131 mg/dl, p<0.05) were significantly higher in the young-onset patients. On the other hand, the level of white blood cell count (4814 vs 5301/ul, p<0.001), neutrophil count (2822 vs 3201/ul, p<0.001), lymphocyte count (1512 vs 1632/ul, p<0.01), C3 (87.2 vs 93.2 mg/dl, p<0.01), C4 (22.1 vs 24.7 mg/dl, p<0.001), and CH50 (48.2 vs 51.1 ml, p<0.01) were significantly lower in the young-onset patients. While the young-onset patients had higher rate of liver dysfunction (3.99 vs 0.54%, p<0.05), and arthritis (6.81 vs 2.69%, p<0.05), the elderly-onset patients were more frequently complicated with pulmonary disease (4.2 vs 11.8%, p<0.01). The C3 levels in the elderly-onset patients with pulmonary disease were conversely lower than the young-onset patients with pulmonary disease. The incidence of lymphoma was not different between two groups.

Conclusions: Although elderly onset pSS patients have milder symptoms and immune-dysfunctions than young-onset ones, pulmonary disease was more frequently affected in the elderly-onset patients with a decrease in complement levels, suggesting there may be difference in the pathogenesis in pSS according to onset ages and organ involvement.

REFERENCES: