According to CT findings, 23% had nodules in the lung, nodule sizes were less than 1 cm, and patients were followed up for an increase in size. Hilar and subcarinal lymph nodes were present in 6% of patients and their sizes ranged from 5 mm to 15 mm. Bronchoscopy was performed for two patients due to mediastinal LAP. Biopsy results were evaluated as reactive changes.

Interstitial lung disease (ILD) findings were present in 16 patients. (69% NSIP, 25% LIP, 6% UIP). All patients with ILD received steroid therapy. Two patients received 6 cycles of cyclophosphamide treatment for active alveolitis and azathioprine (AZA) was used in maintenance therapy. Due to ILD, one patient was receiving rituximab, one patient was receiving mycophenolate mofetil, while nine patients were using AZA.

It was found bronchiectasis in 3% of patients, emphysema in 5%, sequelae fibrotic changes in 13%, and 1% patients had thickening of the pleura. One patient was diagnosed with hypersensitivity pneumonia and two patients had lung cancer (Table-1).

There was a smoking history in 21% of the patients. There was a significant relationship between smoking and development of emphysema and malignancy. The relationship between smoking and lung cancer development could not be assessed due to the absence of lung cancer in the non-smoking group (Table-2).

Conclusion: Lung findings are detected in 9-12% of patients in pSS, which can increase to 75% with the use of tomography, pulmonary function tests and bronchoscopy.

Since pSS has a wide spectrum from airway disease or interstitial lung disease to BALT lymphoma lung involvement of the disease has been emphasized.

References:

- [1] Hatron PY, Tillie-Leblond I, Launay D, et al.: Pulmonary manifestations of Sjogren's syndrome. *Presse Med.* 40:e49-e64 2011

Table 1. Lung Findings of Primary Sjogren's Syndrome Patients

	% (N)
Nodule	23(34)
Mediastinal LAP	9(6)
Interstitial Lung Disease	11(16)
NSIP	69(11)
LIP	25(4)
UIP	6(1)
Bronchiectasis	3(4)
Atelectasis	5(7)
Emphysema	5(7)
Sequelae Fibrotic Change	13(19)
Tuberculosis Sequelae	1(2)
Airway disease	1(1)
Pleural effusion	1(2)
Lung cancer	1(2)

Table 2. Effects of smoking on lung findings

N(%)	Smoker 31(21)	Non-Smoker 107(71)	p	OR	%95 CI
Emphysema	6(19)	1(1)	0.001	25	2.9-220
Interstitial Lung Disease	2(7)	14(13)	0.524	0.458	0.09-2.13
Raynaud	6(19)	22(21)	0.883	0.926	0.33-2.53
LAP	10(32)	32(30)	0.802	1.11	0.47-2.63
Nodule	9(29)	23(22)	0.381	1.49	0.60-3.68
Malignancy	7(23)	8(8)	0.043	3.6	1.19-10.9
Lung Cancer	2(7)	0	-	-	-
Atelectasis	2(7)	3(3)	0.313	2.39	0.38-14.9
Bronchiectasis	0	4(4)	-	-	-

Disclosure of Interests: : None declared

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AB0440 LDL-CHOLESTEROL AS A RISK FACTOR OF PROGRESSION TO ESRD IN PATIENTS WITH LUPUS NEPHRITIS

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Background:

Objectives: There are few data on the effect of dyslipidemia in patients with lupus nephritis (LN). Thus, we investigated the effect of low-density lipoprotein-cholesterol (LDL-C) on the progression to end-stage renal disease (ESRD) in patients with biopsy-proven LN.

Methods: We followed 121 LN patients who underwent kidney biopsy and were subsequently treated with immunosuppressive drugs. Sociodemographic, clinical, laboratory (including lipid profile), and treatment-related data at the time of kidney biopsy and during follow-up were obtained by a review of patients' charts.

Patients were divided into two groups related to the mean LDL-C level: <100 mg/dL and ≥100 mg/dL. Cox's proportional regression analysis was performed to identify the independent predictors of progression to ESRD in LN patients.

Results: Seventy-one of 121 biopsy-proven LN patients (58.7%) showed more than 100 mg/dL of LDL-C at the time of LN diagnosis. The higher LDL-C group excreted more 24-hour urine protein (p=0.003), and showed a higher proportion of proliferative LN (p=0.013) and an activity score >12 (p=0.023). During a mean follow-up of 83.0 (range, 12–171) months, ESRD was more frequent in the higher LDL-C group than in the lower group (15.5% vs. 2.0%; p=0.012). In the multivariate Cox's proportional regression analysis, LDL-C ≥100 mg/dL (hazard ratio [HR], 171.340; p=0.012), estimated glomerular filtration rate during the renal biopsy (HR, 0.977; p=0.005), statin exposure during follow-up (HR, 0.163; p=0.031), relapse (HR, 9.752; p=0.036), and complete remission at 1-year of treatment (HR, 0.034; p=0.003) were significant predictors of progression to ESRD in LN patients.

Conclusion: Our findings suggest that dyslipidemia at the onset of LN is an independent risk factor for predicting the development of ESRD in LN patients. Therefore, lipid profile should be monitored carefully and managed aggressively to avoid the deterioration of kidney function in patients with LN.

Disclosure of Interests: None declared

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AB0441 ASSOCIATION OF CO-POSITIVITY FOR ANTI-DSDNA, -NUCLEOSOME, AND -HISTONE ANTIBODIES AND DISEASE ACTIVITY IN PATIENTS WITH LUPUS NEPHRITIS: RESULTS FROM THE KORNET REGISTRY

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Background: Recent studies have shown that the simultaneous positivity of anti-double stranded DNA, -nucleosome, and -histone antibodies (3-pos) is prevalent in lupus nephritis (LN) patients compared to non-renal systemic lupus erythematosus (SLE) patients.

Objectives: The aim of this study was to define the clinical, biologic, histopathologic, and prognostic differences according to the simultaneous reactivity to those antibodies in Korean patients with biopsy-proven LN.

Methods: We studied 102 patients who underwent kidney biopsy prior to the start of induction treatment and who were subsequently treated with immunosuppressives and followed-up for more than 12 months. Sociodemographic, clinical, laboratory, and treatment-related data at the time of kidney biopsy and during follow-up were obtained by a review of patients' charts. Antibodies were detected by immunoblot analysis or ELISA at the time of renal biopsy.

Results: Fifty-eight (35.4%) of the total of 102 LN patients had 3-pos. In comparison with non-3-pos patients, the patients with 3-pos showed a higher SLE Disease Activity Index-2000 score (P=0.002), lower lymphocyte level (p=0.004), higher proportion of proteinuria >3.5g/24hr (p=0.005), and higher positivity of urinary sediments (p=0.005) at the time of renal biopsy. In the renal histopathologic findings, the patients with 3-pos had more proliferative LN (p=0.015) and also showed more endocapillary hypercellularity, sub-endothelial hyaline deposits, fibrinoid necrosis/karyorrhexis, and cellular crescents in the disease activity index (p=0.016, p=0.045, p=0.002, and p=0.022, respectively), as well as a higher activity score (p=0.011). After a median follow-up of 83.2 months, rapid glomerular filtration rate decline was frequently observed in patients with 3-pos compared to those without (p=0.012).

Conclusion: Our findings suggest that 3-pos is related to severe LN and, furthermore, that patients with 3-pos show a rapid decline of renal function compared to those without.

Disclosure of Interests: None declared

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AB0442 RISK FACTORS ASSOCIATED WITH THROMBOTIC EVENTS IN KOREAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background:

Objectives: Up to 30–40% of all patients with systemic lupus erythematosus (SLE) experience thrombosis, presenting as stroke and myocardial infarction, and these thrombotic events cause substantial morbidity and mortality in SLE. We explored the risk factors associated with the occurrence of thrombotic events in SLE patients.

Methods: This study enrolled 259 SLE patients (mean age, 34.0 ± 13.7; 239 females) with available clinical data at the time of SLE onset from the lupus cohort at Chonnam National University Hospital. Sociodemographic, clinical, and laboratory data, and history of concomitant diseases were obtained. Thrombotic events were defined as the presence of arterial or venous thrombosis. The

multivariable Cox's model was performed to investigate the possible risk factors for thrombotic events.

Results: During a mean follow-up of 103.3 months (SD, 53.4), 27 patients (10.4%) developed thrombotic events: stroke in 15 patients, venous thrombosis in five patients, myocardial infarction in four patients, and angina in three patients. In the multivariable Cox's regression analysis, hypertension (hazard ratio [HR], 16.946; P=0.031), antiphospholipid syndrome (APS) (HR, 18.348; P=0.001), cumulative prednisolone >5mg/day (HR, 14.374; P<0.001), use of ACE inhibitors (ACEi) or angiotensin receptor blockers (ARB) (HR, 0.110; P=0.004), and Systemic Lupus International Collaborating Clinics Group (SLICC) damage index (HR, 1.972; P=0.004) were significant predictors of the development of thrombotic events in patients with SLE.

Conclusion: Patients with SLE showed significant thrombotic events during the course of their disease. Risk factors associated with thrombotic complications were higher cumulative dose of prednisolone, diagnosis of APS, and higher SLICC damage index. On the other hand, the use of ACEi or ARBs was associated with a reduced risk of thrombotic complications in patients with SLE. Our results support the need for increased monitoring of thrombotic complications in SLE patients.

Disclosure of Interests: : None declared

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AB0443

RENAL TRANSPLANTATION IN LUPUS NEPHRITIS. LONG-TERM FOLLOW-UP. STUDY FROM A SINGLE REFERRAL CENTER.

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Background: Lupus nephritis (LN) is a severe complication of systemic lupus erythematosus (SLE). Approximately 10-20% of LN develop end stage renal disease (ESRD) and need replacement therapy. Renal transplantation may be a good option. However, concerns about LN recurrence after renal transplantation have been reported.

Objectives: In a series of 23 patients with first renal transplantation due to LN our aim was to assess **a)** clinical features, **b)** renal transplantation as replacement therapy, **c)** SLE flares after transplantation

Methods: Observational study of unselected all consecutive patients studied in a single reference University Hospital with: **a)** diagnosis of SLE by ACR/SLICC 2012 criteria, **b)** diagnosis of NL by performing biopsy (according to the World Health Organization and International Society of Nephrology/Renal Pathology Society classification), **c)** first renal transplant. Cumulative survival rates after transplantation were estimated by the Kaplan-Meier method.

Results: We studied 23 (16 women/7 men) patients with first renal transplantation due to LN; mean age at SLE diagnosis of 26.37±12.70 years and mean age at kidney transplantation of 39.80±11.27 years. Mean follow-up of 12.18±9.02 years. Demographic baseline characteristics and clinical manifestations of these patients are shown in TABLE 1 and 1.1.

TABLE 1. Demographic baseline characteristics and clinical manifestations of patients with renal transplantation due to LN.

DEMOGRAPHIC PARAMETERS	
Sex, n (%)	7 ♂ / 16 ♀ (30.4%/69.06%)
Age at SLE diagnosis (years), mean ± SD	26.37±12.70
Age at renal transplantation, mean ± SD	39.80±11.27
SLE RELATED DATA	
Systemic symptoms	
Fever, n (%)	12.0 (52.17)
Weight loss, n (%)	8.0 (34.78)
Asthenia, n (%)	3.0 (30.0)
Articular affection	
Joint swelling, n (%)	12.0 (52.17)
Arthralgia, n (%)	9.0 (39.13)
Arthralgia, n (%)	3.0 (13.04)
Skin affection	
Malar erythema, n (%)	13.0 (56.52)
Discoid lupus, n (%)	2.0 (8.6)
Photosensitivity, n (%)	0.0 (0.0)
Ulcers, n (%)	3.0 (13.04)
Alopecia, n (%)	5.0 (21.73)
Raynaud, n (%)	3.0 (13.04)
	1.0 (4.34)

The main clinical manifestations at diagnosis were articular (n= 12; 52.17%) and cutaneous (n=13; 56.52%). On the other hand, 16 patients (69.6%) presented impaired renal function at diagnosis. In the other 7 patients (30.4%), this manifestation appeared with a delay of diagnosis from the onset of symptoms of 13.17±7.73 years.

Renal biopsy had been performed in 21 patients with LN: type II LN (n=2; 9.1%), type III (n=8; 36.4%), type IV (n=9; 40.9%) and type V (n=2; 9.1%). Patient and graft survival function after transplantation is represented in Figure 1 and 2.

TABLE 2. 1.1.	
SLE RELATED DATA	
Renal involvement	16.0 (69.56)
Hematological involvement	13.0 (56.52)
Anemia, n (%)	6.0 (26.10)
Leukopenia, n (%)	5.0 (21.73)
Thrombocytopenia, n (%)	2.0 (8.70)
Pericarditis	2.0 (8.70)
Nervous system	6.0 (26.10)
Peripheral, n (%)	1.0 (4.34)
Central	4.0 (17.40)

Figure 1.

Figure 2.

Regarding lupus flares after transplantation, 3 patients (13.04 %) developed a lupus flare: 2 cases presented as extrarenal disease (one of them was a pneumonitis and the other one was a cutaneous and articular flare) and only 1 case with histological recurrence in the graft (Mean follow-up 15.00±9.84 years).