Conclusions Dyslipidemia is a significant comorbidity of LN that severely affects its renal and overall outcome. Its treatment represents a modifiable risk factor; adequate management can decrease its complications in LN patients and therefore improve their overall morbidity and mortality.

PS8:170 LUPUS NEPHRITIS IN A MULTI-ETHNIC COHORT OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS FROM BERKSHIRE, UK

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Background Previous studies suggest that ethnicity influences the clinical phenotype in systemic lupus erythematosus (SLE), with lupus nephritis (LN) being more frequent in non-Caucasians. However, there are scarce data regarding prevalence of LN in South-Asian population (Indians, Pakistani, Sri Lanka, or Bangladeshis).

Objectives This study aimed to compare the prevalence of LN between lupus patients of different ethnicities, and to compare demographics and disease characteristics between LN patients.

Methods This is a retrospective chart review study of 100 lupus patients followed from 2013 to 2017 at Wexham Park Hospital, a large district hospital in Southern England. The patients were categorised into four ethnic groups Caucasians, South-Asians, Blacks and Others (mixed race, Orientals, Arabs). LN prevalence, demographic and clinical data were compared using Fisher/Chi-Square tests for categorical variables and Wilcoxon test for continuous variables.

Results Of 100 patients in the study sample, 51% were Caucasians, 31% were South-Asians, 11% were Blacks and 7% had other ethnicities. Mean age was 48 yo and 90% were females. Prevalence of LN was 26% in the full study sample and 24% (16%, 64% and 57%), respectively, among Caucasians, South-Asians, Blacks and Others. LN prevalence was significantly lower in Caucasians vs Blacks (p=0.01), South-Asians vs Blacks (<0.01) and South-Asians vs Other (p=0.02). Among patients with LN, mean age was lower in South-Asians and Blacks, than Caucasians and Others (44 and 45 yo vs 52 and 51 yo). Blacks appear to include more males (43% vs <25% in the other groups). Renal biopsy, available for 22/26 LN patients, suggested Class II predominance in Caucasians (44% vs 33%) in the other groups). Proliferative LN (Class III and IV) was confirmed in 7 patients, without significant predominance in any ethnic group. Specific lupus autoantibodies (anti-dsDNA Ab and/or antiSm Ab) were found in 64% Caucasians, 75% south-Asians, 86% Blacks and 75% others with LN.

Conclusion In our cohort, prevalence of LN in South-Asians was lower than in Blacks, but not statistically different comparing with Caucasians. However, South-Asians and Blacks with LN were younger than Caucasians. These results should be re-examined in larger similar multi-ethnic cohorts.

PS8:171 ENDOTHELIAL DYSFUNCTION AND VASCULAR RISK FACTORS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives Lupus systemic erythematosus is characterised by an increasing risk of premature cardiovascular disease (CVD). CVD is one of the most common causes of death in SLE. Subclinical atherosclerosis in comparison to general population is also more prevalent, especially the presence of plaques at the carotid level, as well as thickening of the carotid intima.

The aetiology of atherosclerotic disease is completely unknown. It involves: traditional risk factors (age, male gender, smoking, diabetes, hypertension, dyslipidemia, obesity) as well as risk factors related to the disease itself and the treatments used.

Methods A cross-sectional study was carried out from March to November 2015 in 119 patients. Patients were recruited from consultation at the Systemic Autoimmune Diseases Unit for a routine medical check. Clinical data on the disease (from diagnosis to the time of inclusion in the study) were obtained by reviewing the medical history.

The population was divided into two groups: patients with lupus and endothelial dysfunction and patients with lupus without endothelial dysfunction. The existence of endothelial dysfunction was explained by the presence of plaques at the carotid and/or intimate mean thickness >0.8 in a doppler ultrasonography.

Results There is no association with taking antimalarials, immunosuppressants, corticosteroids prior to high doses.

As for the classification criteria there is no relation with the presence of malar rash, Photosensitivity, Oral ulcers, Arthritis, Serositis, Nephropathy, Cytopenias and DNA.

No significant differences were detected in the determination of antibodies or complement levels.

No differences were found with SLEDAI. Since lupus is a disease that occurs in outbreaks, finding no differences may be due to the fact that at the time of inclusion patients had a low activity.

The presence of hypertension and dyslipidemia favours the existence of endothelial dysfunction. Hypertensive patients have a five-fold increased risk of developing endothelial dysfunction (5,593, 95% CI: 2340 to 14,015) as well as patients with dyslipidemia with a nearly 3-fold increased risk (2,976 CI: 1191 to 7,591).

Conclusion The presence of hypertension and dyslipidemia favours the existence of endothelial dysfunction. Hypertensive patients have a five-fold increased risk of developing endothelial dysfunction (5,593, 95% CI: 2340 to 14,015) as well as patients with dyslipidemia with a nearly 3-fold increased risk (2,976 CI: 1191 to 7,591).
CHARACTERISTICS OF LUPUS NEPHRITIS IN SAUDI LUPUS PATIENTS: A RETROSPECTIVE OBSERVATIONAL STUDY

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Objective The aim of this study is to evaluate the prevalence, clinical, laboratory and histological types of lupus nephritis (LN) among Saudi patients.

Methods This is a retrospective study that done at King Fahad Medical City, Riyadh, Saudi Arabia, where clinical and laboratory data collected for a period from 2011–2016. All patients fulfilled the Systemic Lupus International Collaborating Clinics classification criteria (SLICC).

Results Out of 112 patients, 103 (92.0%) females, 9 (8.0%) males, mean age 34 (33.87±10.42) years. The mean of initial proteinuria level was 0.72 gm (0.72±1.34) and the mean serum creatinine 34.00 (82.33±83.88). The most common clinical characteristics were skin rash 70% and photosensitivity 61%.

With regards to comorbidities; Hypertension was found in 31 (27.7%), Hyperlipidemia in 16 (14.3%) and Diabetes mellitus in 12 (10.7%) of SLE patients.

Laboratory investigations revealed 67.0% had a positive ANA, 60.7% positive Anti DsDNA, 27.7% positive aPL, 17.9% positive Anticardiolipin IgG, 18.8% positive Anticardiolipin IgM, and B2glycoprotein IgG was positive in 8.9% of patients.

44 (39.8%) out of 112 patients had a kidney biopsy and the histological types were as follow; Focal segmental glomerulosclerosis (FSGS) 2.2%, class I 2.2%, class II 6.8%, class III 27.2%, class IV 43.1%, V 6.8%, minimal change disease (MCD) 2.2%, Thrombotic Microangiopathy (TMA) 2.2%, non-specific 2.2% Normal 2.2%, poor biopsy 2.2%.

Conclusion

- The most notable clinical manifestations were skin rash 70% followed by photosensitivity 61% and arthralgia 39%.
- Patients with Hypertension, hyperlipidemia and diabetes mellitus had a higher risk of developing LN at any stage by 10%–28%.
- The commonest class of lupus nephritis among our patients as proven by kidney biopsy is class IV 43.1% followed by class III 27.2%.