AB0606 **NEUROPSYCHIATRIC LUPUS IN A SAMPLE OF EGYPTIAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: PREVALENCE AND CLINICAL CHARACTERISTICS**

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Background: Neuropsychiatric (NP) lupus is common among patient with systemic lupus erythematosus (SLE). It occurs in about 30%–56% of all SLE patients. However, the diagnosis of neuropsychiatric SLE (NPSLE) remains difficult. Neuropsychiatric lupus (NPL) can present with a wide variety of clinical manifestations.

Objectives: The aim is to determine prevalence of NPSLE among a sample of Egyptian SLE patients from a single centre and to describe its features and characteristics.

Methods: The study included 301 adult SLE patients from Cairo University Hospital. The patients are classified according to the Systemic Lupus International Collaborative Clinics (SLICC) criteria for SLE. Neuropsychiatric manifestations were recorded using the ACR NPSLE nomenclature and case definitions (1999) Global disease activity was quantified by the SLE Disease Activity Index 2000 (SLEDAI-2K) at first and at last visit of the patient. Systemic Lupus International Collaborative Clinics/ACR Damage Index (SLICC/ACR-DI) was used to measure damage. The period of data collection took 4 months. The collected data included demographic, clinical, serologic data and medications.

Results: 301 SLE patients (87.4%) females and (12.6%) males with mean age 30.7 ± 9.2 years and disease duration 72 months (2–288) were included. 101 (33.5%) were diagnosed as having NPSLE. The highest NP manifestation in frequency is headache (55.4%) followed by psychosis (33.7%) then seizures (21.8%). NP manifestation is the onset of the disease in 42.6% of all NPSLE patients. Compared to non-NPSLE group, NPSLE group is significantly older at onset of disease and have longer disease duration ($p < 0.05$). They are significantly more active at the onset of the disease than non-NPSLE and have significantly more disease damage ($p < 0.05$). Regarding clinical manifestations of lupus; NPSLE are significantly higher in frequency of discoid rash, cutaneous vasculitis, serositis, secondary anti-phospholipid syndrome (APS), associated avascular necrosis of the joints and osteoporosis ($p < 0.05$). Anti-cardiolipin IgM anti bodies are significantly more frequent in NPSLE group ($p < 0.05$). Notably, frequency of psychosis, superior sagittal thrombosis and cerebrovascular disease were significantly higher in NPSLE with positive APS than those with negative APS ($p < 0.05$).

Conclusions: NPL is common in SLE, its prevalence is about 30% in Egyptian SLE patients. NPSLE patients may present diverse clinical manifestations most commonly headache, psychosis and seizures. NPL is different from non-NPL and presence of APS has an impact on clinical presentation of NP involvement in the patients.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6883

AB0607 **CLINICAL PROFILE OF FILIPINO PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS**

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Objectives: To determine the clinical profile of Filipino SLE patients as determined using the 2012 Systemic Lupus Collaborating Clinics (SLICC) criteria.

Methods: We checked which among the SLICC criteria were fulfilled by Filipino SLE patient when we examined them and their case records, as part of a nationwide genetic study on SLE conducted from October 2015 to March 2017.

Results: Two hundred twenty-five patients who were diagnosed to have SLE after 18 years of age were evaluated. The mean age of the population at the time of evaluation was 37.76 years.

Females comprised 98% of our population. Mean age of onset was 30.68-year-old, while the mean age at diagnosis was 31.52-year-old. Acute cutaneous rash was found in 82%; arthritis

80%; non-scarring alopecia 65%; oral ulcers 52%; renal disorder 41%; chronic cutaneous rash in

28%; leukopenia 23%; hemolytic anaemia 17%; thrombocytopenia 16%; serositis 13%; and neurologic disorder 6%. Anti-nuclear antibody was present in 88%; low complement 33%; antidsDNA in 29%; direct Coombs' 4%; antiphospholipid antibody 2%; and anti-Smith antibody in

2%. Kidney biopsy was performed in only 6% (15/225) of patients, 33% of whom had Class IV histopathologic results.

Conclusions: Filipino SLE patients typically present with acute cutaneous rash, arthritis, non-scarring alopecia and oral sores. Renal disorder, hematologic and

neurologic manifestations are found to be less common among them. Finally, it was noted that renal biopsy is not commonly performed among these patients.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6108

AB0608 **CLINICAL PROFILE OF FILIPINO PAEDIATRIC PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS**

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Background: The clinical profile of paediatric SLE patients may present differently from that of adults.

Objectives: To determine the clinical profile of Filipino paediatric SLE patients as determined using the 2012 Systemic Lupus Collaborating Clinics (SLICC) criteria.

Methods: We checked which among the SLICC criteria were fulfilled by Filipino paediatric SLE patient when we examined them and their case records, as part of a nationwide genetic study on SLE conducted from October 2015 to March 2017.

Results: Ninety-eight who were diagnosed to have SLE before 18 years of age were evaluated.

The mean age of the population at the time of evaluation was 19.77 years. Females comprised

94% of our population. Mean age of onset was 14.42-year-old, while the mean age of diagnosis was at 14.58-year-old. Acute cutaneous rash was found in 87%; oral ulcers 65%; renal disorder

65%; non-scarring alopecia 61%; arthritis 58%; chronic cutaneous rash in 37%; leukopenia 36%; hemolytic anaemia 34%; serositis 24%; thrombocytopenia 22% and neurologic disorder 8%.

Anti-nuclear antibody was present in 88%; low complement 33%; anti-dsDNA in 28%; direct

Coombs' 16%; antiphospholipid antibody 3%; and anti-Smith antibody in 1%. Kidney biopsy was performed in only 14% (15/104) of patients, of whom 27% had class III histopathologic characteristic.

Conclusions: Filipino paediatric SLE patients typically present with cutaneous, mucocutaneous renal and musculoskeletal involvement. Hematologic and neurologic manifestations are found to be less common among them. Finally, it was noted that renal biopsy is not commonly performed among these patients.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.6661

AB0609 **CORRELATION BETWEEN PLASMA LIPOPROTEIN PHOSPHOLIPASE A2 (LP-PLA2) AND ANTI PHOSPHOLIPID ANTIBODY (APL-AB) IN PATIENTS WITH CONNECTIVE TISSUE DISEASES**

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Background: Plasma Lp-PLA2 has both anti-inflammatory and pro-inflammatory activity in vascular-related pathologies and is an independent risk predictor for coronary heart disease and stroke because of its important role in atherosclerosis and thrombosis. However, vasculitis is a common pathological feature of connective tissue disease.

Objectives: Therefore, the aim of this study was to investigate the association of plasma Lp-PLA2 level with antinuclear antibody (ANA) titer, karyotype, anti-cardiolipid antibody (ACA) and anti-β2GP1 antibody and lupus anticoagulant (LA), including PT-IgG and PT-IgM).

Methods: Outpatient and inpatient with connective tissue diseases from Department of Rheumatology of the Third Affiliated Hospital of Sun Yat-sen University from 2015 to 2016 were randomly selected. Venous blood was collected, plasma Lp-PLA2 level was measured by Elisa method. ANA titer and karyotype were detected by indirect immunofluorescence assay. ACA, anti-β2GP1 antibody, PT-IgG and PT-IgM were detected by Elisa method. SPSS23.0 statistical software was used for statistical analysis.

Results: A total of 176 patients with connective tissue disease including 38 males (21.59%) and 138 females (78.41%) were enrolled in this study, and the average age was 42.22 ± 17.31 years. The mean plasma level of Lp-PLA2 was (363.96 ± 203.19) ng/ml. There was no significant difference in Lp-PLA2 level between different genders ($p = 0.072$), and Lp-PLA2 level have no correlation with age ($p = 0.098$). The ANA titers were classified as negative (35.80%), weakly positive 1: 100 (11.93%), positive 1: 100 (18.75%), positive 1: 320 (12.50%), positive 1: 1000 and positive 1: 3200 (9.66%). There was no significant difference in plasma Lp-PLA2 level between different titers of ANA ($p = 0.088$). ANA karyotypes

included nucleolus type (0.88%), centromere type (3.54%), cytoplasm type (7.96%), homogeneity (29.20%) and granularity (58.41%). Also, there was no significant difference in plasma Lp-PLA2 level between different karyotypes ($p=0.153$). The average level of ACA was 12.88 ± 23.87 RU/ml and there was no significant correlation between plasma Lp-PLA2 level and ACA level ($p=0.839$). Anti- β 2GP1 antibodies were classified as negative (<20 U/ml, 91.48%) and positive (≥ 20 U/ml, 8.52%). Plasma Lp-PLA2 level did not differ significantly between anti- β 2GP1 antibody negative and positive patients ($p=0.449$). Lupus anticoagulant PT-IgG and PT-IgM were classified as negative (<18 U/ml) and positive (>18 U/ml). PT-IgM were all negative and there was no significant difference in plasma Lp-PLA2 level between PT-IgG negative (96.59%) and positive (3.41%) patients ($p=0.279$).

Conclusions: Plasma Lp-PLA2 level in patients with connective tissue disease have no significant correlation with age, gender, ANA titer, karyotype, ACA, anti- β 2GP1 antibody and LA. The role of plasma Lp-PLA2 in connective tissue disease may be different from APL-Ab.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4539

AB0610 CORRELATION BETWEEN TRADITIONAL CARDIOVASCULAR RISK INDEXES AND ARTERIAL STIFFNESS IN PATIENTS WITH GENERALISED LUPUS ERYTHEMATOSUS

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Background: Cardiovascular disease (CVD) is the leading cause of late death in patients with systemic lupus erythematosus (SLE). SLE is related with up to 50 fold risk of CVD. SLE is recognised as an independent cardiovascular risk factor (CVR). However, traditional scales underestimates the CVR in SLE.

Objectives: Determine the correlation between traditional CVR scores (Framingham, systematic coronary risk evaluation (SCORE), arteriosclerotic cardiovascular disease (ASCVD) and arterial stiffness (AS) in an open population of SLE, assessing AS by pulse wave velocity (PWV), vascular damage through cardio-ankle vascular index (CAVI), ankle-brachial index (ABI), quality intima media thickness (qIMT) and SLE disease activity using the systemic lupus erythematosus disease activity index (SLEDAI) and systemic lupus international collaborating clinics (SLICC).

Methods: Patients with SLE of 18 years old and older, diagnosed according to SLICC 2012 criteria. Informed written consent. AS was determined by PWV, CAVI, ABI, and qIMT. Disease activity was recorded by SLEDAI and SLICC. Comparison between qualitative variables will be done through the X2 test or the Fisher exact test. For comparison of the quantitative variables with normal distribution Student's T and ANOVA tests were done. The correlation coefficient (r) of Pearson was calculated. Variables with a $p \leq 0.2$ value were included in a multiple linear regression model to evaluate the influence of the disease variables on CVR. SPSS v.22 software (IBM, inc) and the Graphpad V software were used.

Results: The total of SLE patient were 44 (100%), with a mean age of 34 ± 12 years old. Thirty six women (82%). The mean evolution time was 6 ± 5 years. Smoke was registered in 16% (7 cases). Systolic blood pressure 110 ± 14 , diastolic blood pressure 73 ± 11 mmHg. Body mass index 28.4 ± 9.1 , total cholesterol 186 ± 47 , triglycerides 143 ± 67 , cHDL 42.9 ± 5.1 , cLDL 57 ± 27 mg/dL. Erythrocyte sedimentation rate of 17 ± 14 mm/hr, cReactive protein 7.1 ± 4.8 mg/L. Anti-dsDNA antibodies were present in 47.7% of the cases.²¹ Secondary antiphospholipid syndrome in 13.6%.⁶ Mean SLEDAI 8 (range 0–32), mean SLICC 1 (range 0–6). C3 levels 83.6 ± 21.4 , C4 19.5 ± 18.8 mg/dL. The most important correlations found were with qIMT and age 0.651 (<0.001), BMI 0.513 ($p 0.001$), cRp 0.351 (0.033), cLDL 0.400 (0.01). Framingham score was able to predict CVR up to 44.8% the measurement of PWV, ASCVD in 30% and SCORE up to 22%.

Conclusions: Traditional scores (Framingham, SCORE, ASCVD) underestimate cardiovascular risk in patients with SLE. The most important finding is that qIMT was able to correlate more than age, to BMI and cLDL in SLE patients.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.7409

AB0611 DISEASE ACTIVITY AND ORGAN DAMAGE IN PATIENT WITH CHILDHOOD-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS, FROM CHILDHOOD TO ADULTHOOD: A RETROSPECTIVE STUDY OVER THE LAST 25 YEARS

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Background: Although clinical symptoms and immunological findings are common in both children and adults with systemic lupus erythematosus (SLE), children generally have a more severe clinical presentation at the time of diagnosis with a larger number of affected organs, a much more aggressive clinical course and greater chance of developing organ damage over time.

Objectives: To compare the SLEDAI-2K disease activity index in patients with SLE at the time of diagnosis with SLEDAI-2K in the same patients in adulthood and to compare of the SLICC/ACR damage index (SDI) in patients with cSLE at the last follow up in childhood with SLICC/ACR of the same patients in adulthood.

Methods: This retrospective study included children who were diagnosed with cSLE, according to the ACR 1997 and SLICC 2012 criteria, in the period from 1991–2016 at the Referral Centre for Paediatric and Adolescent Rheumatology Republic of Croatia, Department of Paediatrics, University Hospital Centre Zagreb and who by the end of March 2017 reached the age of majority at 18 and continued their treatment at the Department of Internal Medicine, University Hospital Centre Zagreb.

Results: Out of 95 children with cSLE, 48 patients (42 females and 6 males) who attained the age of majority, were included in the study. Mean age at the time of diagnosis was 13.5 years (range 6–18), and the mean disease duration was 11 years. Mean SLEDAI-2K was 19.25 (range 0–42) in childhood and 7125 (range 0–30) in adulthood. In adulthood, thirty-two patients (66.67%) showed improvement, three (6.25%) disease progression, six (12.5%) had the same disease activity and seven patients (14.58%) were in remission. 13 children (27%) had organ damage at the last follow up with mean SDI 0.43 (0–6) and 20 patients in adulthood (41.67%) had organ damage with SDI 0.75 (0–6). Cataract, erosive arthritis and avascular necrosis were the most common organ damage in both groups. The most common presenting symptoms in childhood were musculoskeletal (predominantly arthritis) occurring in 34 children (70.83%), mucocutaneous (rash) noted in 31 (64.58%) and fever in 21 patients (43.75%). Of different laboratory tests the most common were positive antinuclear antibodies (ANA) screen (95.83%) and hypocomplementaemia (75%). Proteinuria was noticed in 26 children (54.17%). Similarly, in adulthood the most common symptoms were arthritis in 10 (20.83%) and rash in 8 patients (16.67%). Alopecia, headaches and visual disturbances were represented with 12.5% each. ANA screen was positive in 27 patients (56.25%) and hypocomplementaemia present in 22 patients (45.83%).

Conclusions: At the time of diagnosis in childhood, disease activity is very high while in adulthood there is a significant decrease in disease activity. Higher disease activity in childhood is related to the development of the organ damage in adulthood.

REFERENCES:

- [1] Couture J, Silverman ED. Update on the pathogenesis and treatment of childhood-onset systemic lupus erythematosus. *Curr Opin Rheumatol*. 2016;28:488–96
- [2] Brunner HI, Silverman ED, To T, et al. Risk factors for damage in childhood-onset systemic lupus erythematosus: cumulative disease activity and medication use predict disease damage. *Arthritis Rheum*. 2002;46:436–44

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.4567