predictors of TAS-20 values were to be fibromyalgic and to have mild-to-severe depression according to BDI. In multiple logistic regression, alexithymia was significantly associated to BDI score (OR 1.2, 95% CI 1.0–1.4) and inversely associated to cognitive impairment (OR 0.1, 95% CI 0.02–0.8).
Conclusions: SLE patients frequently present alexithymic tract. Alexithymia seems to be associated neither to disease feature, to disease course (activity and damage) and to SLE therapy, nor to HR-QoL expressed by SF-36. Nevertheless, alexithymia could be tightly related to QoL-associated factors as depression and fibromyalgia
Disclosure of Interest: None declared
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SAT0274 URINARY VITAMIN D-BINDING PROTEIN AS A BIOMARKER FOR LUPUS NEPHRITIS

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Background: Lupus nephritis (LN) is a major complication of systemic lupus erythematosus (SLE). However, conventional biomarkers for assessing renal disease activity are imperfect in predicting clinical outcomes associated with LN.
Objectives: The aim of this study is to identify urinary protein biomarkers that reliably reflect the disease activity or predict clinical outcomes.
Methods: A quantitative proteomic analysis, using liquid chromatography coupled with tandem mass spectrometry (LC-MS/MS), was performed to identify protein biomarker candidates that can differentiate between SLE patients with and without LN. Selected biomarker candidates were further verified using urine samples from a larger cohort of SLE patients (n=121) by enzyme-linked immunosorbent assay (ELISA) to investigate their predictive values for LN activity measure. Furthermore, association between urinary level of selected panel of potential biomarkers and prognosis of LN was assessed with a 4-year follow-up study of renal outcomes.
Results: From proteomic assay, vitamin D binding protein (VDBP), transthyretin (TTR), retinol binding protein 4 (RBP4) and prostaglandin D synthase (PTGDS) were selected as candidates for quantification. These proteins were significantly elevated in SLE patients with LN, especially in patients with active LN (n=21). Among them, VDBP well correlated with severity of proteinuria (rho =0.661, $P<0.001$) and renal SLE disease activity index (renal SLEDAI) (rho =0.520, $P<0.001$). In the 4-year follow-up, VDBP was a significant risk factor (hazard ratio 9.627, 95% CI 1.698 to 54.571, P=0.011) for the development of proteinuric flare (randum urine protein/creatinine ratio >1.0) in SLE patients without proteinuria (random urine protein/creatinine ratio <0.5) (n=100) after adjustments of multiple confounders.
Conclusions: Urinary VDBP correlated with proteinuria and renal SLEDAI, and predicted the development of proteinuria.
Disclosure of Interest: None declared
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SAT0275 COMPARISON OF CLINICAL AND SEROLOGICAL DIFFERENCES ACCORDING TO THE AUTOANTIBODY CLUSTER IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS: RESULTS FROM THE KOREAN LUPUS NETWORK (KORNET) REGISTRY

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Objectives: Individual autoantibodies are associated with the clinical features in patients with systemic lupus erythematosus (SLE). However, few studies have investigated differences in disease presentation based on autoantibody profiles in Asian patients with SLE. This study evaluated autoantibody clusters and compared the clinical and serological presentation and clinical outcome in Korean SLE patients.
Methods: The Korean Lupus Network (KORNET) is a nationwide multicenter, hospital-based registry, set up to prospectively assess outcomes in Korean SLE patients. Of the 505 SLE patients enrolled in the KORNET registry from July 2014 to November 2015, the study group comprised 339 consecutive female SLE patients. Seven autoantibodies (anti-dsDNA, anti-Sm, anti-RNP, anti-Ro, anti-La, lupus anticoagulant (LAC), and anti-cardiolipin antibody [aCL]) were selected for cluster analysis using the K-means cluster analysis procedure.
Results: Three distinct autoantibody clusters were identified: cluster 1, anti-dsDNA and anti-Ro; cluster 2, anti-RNP; and cluster 3, anti-RNP, anti-Ro, and anti-La. Compared with patients in clusters 2 (n=99) and 3 (n=85), patients in cluster 1 (n=155) had a shorter symptom duration before SLE diagnosis and higher incidence of biopsy-proven lupus nephritis. Patients in cluster 3 had a higher incidence of discoid rash, central nervous system involvement, lupus pancreatitis, pulmonary arterial hypertension, Raynaud's phenomenon, and premature gonadal failure. In addition, patients in cluster 3 had the lowest proportion of mean prednisolone >7.5 mg/day in the medication history.
Conclusions: Autoantibody clusters were associated with the clinical features in women with SLE. Clustering autoantibodies could be a valuable approach for differentiating between various clinical subsets of SLE, and may help to guide prediction of the subsequent clinical course and organ damage in these patients.
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SAT0276 EYE TOXICITY IN PATIENTS WITH SYSTEMIC LUPUS ERITHEMATOSUS TREATED WITH ANTIMALARICS IN DOMINICAN REPUBLIC

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Background: Antimalarics are derivatives of quinine indicated in the treatment of autoimmune inflammatory diseases. The mechanism of antimalarial toxicity is unclear. It is hypothesized that toxicity is a result of drug binding to retinal pigmentary epithelium, damaging photoreceptors resulting in vision loss. Early retinal toxicity is asymptomatic with subtle alterations in foveal pigmentation generally not evident at routine ophthalmologic examination, progressively producing classic "bull's-eye" maculopathy, manifested as a decrease in central, color and night vision, and central scotoma. To prevent the sequelae of antimalarial use, sensitive tools are used to detect toxic maculopathy such as: campimetry, optical coherence tomography (OCT) and eye fundus.
Objectives: To evaluate ocular toxicity in patients with systemic lupus erythematosus treated with antimalarics.
Methods: Multicenter cross-sectional study, two rheumatology departments clinical records were analyzed from January 2016 to January 2017, with diagnosis of systemic lupus erythematosus according to ACR 1997 criteria, with $\geq$4 years using antimalarial drugs. 298 patients were identified, 93 of them fulfilled inclusion criteria, and were evaluated by two retinologists performing OCT on each patient. Accumulated antimalarial doses were calculated and all variables were analyzed with SPSS software V.22.
Results: 97.8% were females, the mean age was 37.4±13 years, 78.5% of the patients used 4mg/kg of chloroquine (CQ) versus 21.5% took 6mg/kg of hydroxychloroquine (HCQ), the mean use duration was 5.1±2 years, 19.4% of patients had retinal pigment epithelium (RPE) changes suggesting maculopathy, of which, 15% used CQ versus 4.35% with HCQ, 54.50% using CQ had a cumulative dose of 365 grams, 10.75% with HCQ had cumulative doses of 292 grams, and the mean for the cumulative dose of both antimalarials was 485 grams.
Conclusions: Previous studies have shown that the antimalarial toxicity rate are between 7.5%>13.1%, in our population we observed that our patients had a higher toxicity rate associated with the use of CQ compared to HCQ, and no association was found relevant with other variables. We understand that both, patients and physicians who manage this drug, should be educated about the need to maintain an adequate ophthalmologic control, due to the progression of retinopathy from 1 to 3 years after discontinuation of treatment. It is necessary to carry out prospective studies with a greater number of patients.
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SAT0277 COGNITIVE DYSFUNCTION IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN DOMINICAN REPUBLIC

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Background: Cognitive dysfunction (CD) is a deficit of cognitive faculties including attention, memory, language, executive function and visuospatial processing. CD is the most frequent neuropsychiatric manifestation of SLE (55–80%) 1 and this is 3 times higher in patients with Systemic Lupus Erythematosus (SLE) than in healthy subjects.2 This is not routinely evaluated because it requires a lot of time. Brief and simple questionnaires are needed to identify CD.
A study carried out by D'Amico et al. evaluated 21 SLE patients and all of them had CD.3 Pedraza et al. analyzed the MMSE score and Montreal Cognitive

Assessment (MOCA) and concluded that MOCA performs much better than MMSE for cognitive impairment correct diagnosis.4

Objectives: To determine the prevalence of CD in SLE patients and compare MMSE and MOCA diagnosis effectiveness.

Methods: All patients with at least 18 years old that met ACR/EULAR 2012 SLE classification criteria were included. Patients with associated comorbidity, not SLE related, that could alter cognitive functions, were excluded. 55 patients that fulfilled the inclusion criteria were admitted to Hospital Docente Padre Billini's rheumatology department from March to April 2016. After obtaining written consent, the psychology department applied both tests, MMSE and MOCA. A standardized form registered demographic variables. Data was analyzed using Microsoft Excel 2013.

Results: 94.5% of the patients were women, 53% were between 31–45 years old, 52.7% were mulatto ethnic, 34.5% had at least a high school degree, 27.2% were diagnosed 1 year before enrollment, 60% had a low activity score using SLEDAI (<4), hypertension was the most common comorbidity with a 38.1%, 90.9% were taking corticoids, 80% were on antimalarial drugs (6 abandoned treatment, 2 by eye involvement, 1 allergic reaction, 2 were diagnosed with SLE the interview day), the most frequent neuropsychiatric symptom ever presented was convulsion (7.2%). Using MMSE 25.4% of the patients showed CD, however after adjusting the results according to the educational level, the percentage increased to 41.8%. MOCA classified that 67.2% of the patients had CD, of which 13 patients were MMSS positive, and finally, 22 classified after the score adjustment.

Conclusions: MOCA is more effective than MMSE to detect CD. Nonetheless the MMSE should be considered as an option for patients with low levels of education.

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SAT0278 INCREASED FREQUENCY OF NAILFOLD VIDEOCAPILLAROSCOPY ABNORMALITIES IN PRIMARY ANTIPHOSPOLIPID (PAPS) PATIENTS

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Background: Primary antiphospholipid syndrome (PAPS) is characterized by venous and arterial thrombosis, obstetric morbidity and the presence of antiphospholipid antibodies. The utility of nailfold videocapillaroscopy in conditions such as scleroderma (SSc) and primary Raynaud's phenomenon is well known. Whether patients with PAPS have specific findings in nailfold videocapillaroscopy is not well stablished.

Objectives: To evaluate findings on nailfold videocapillaroscopy in patients with PAPS and their association with clinical and serological features.

Methods: We prospectively included 26 PAPS patients according to the modified Sidney criteria and the Alarcón-Segovia criteria for haematologic antiphospholipid syndrome, who regularly attend a tertiary referral center in Mexico City, and 15 healthy controls. We performed nailfold videocapillaroscopy according to the Cutolo technique (Optilia 200x) and obtained: capillary morphology, nonspecific abnormalities (tortuosity, crossed and dilated capillaries, capillary haemorrhages, neo-angiogenesis) and mean vascular density on 32 images per patient. We collected demographic, clinical (thrombosis, obstetric morbidity, non-criteria manifestations and comorbidities), serological (anticardiolipin antibodies, anti-β2 glycoprotein 1 antibodies and lupus anticoagulant) and treatment information. Analysis was performed used SSPS v.22, Chi square test was used to compare frequencies and Student's t test was used to compare means.

Results: PAPS patients had higher frequency of at least 1 abnormal finding on videocapillaroscopy (77% vs 12%, p<0.009, OR=23, 95% CI=4–132), higher frequency of enlarged capillaries (69% vs 0%, p=0.0001, OR=33, 95% CI=3.8–295), lower frequency of "perfect normal" pattern (11.5% vs 56%, p=0.004, OR=0.1, 95% CI=0.02–0.48) than controls, and 8 patients (31%) showed changes compatible with the "early" SSc Cutolo pattern (<4 dilated capillaries/mm, <4 haemorrhages/mm, preserved architecture and no avascular areas). In PAPS patients, capillary haemorrhages were associated to neurologic manifestations (75% vs 14%, p=0.02, OR=19, 95% CI=1.4–248) and to comorbidity with hypertension (75% vs 14%, p=0.02, OR=19, 95% CI=1.4–248).

Conclusions: PAPS patients frequently show at least one abnormality on videocapillaroscopy. The most frequent abnormalities are enlarged capillaries, microhaemorrhages and the presence of an "atypical normal" pattern. Capillary haemorrages are frequently found in patients with neurologic involvement of PAPS. The coexistence of hypertension or other comorbidities may contribute to the development of capillary abnormalities in PAPS patients.

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SAT0279 ANTI-RO52 KDA AND ANTI-RO60 KDA ANALYSIS IN SYSTEMIC LUPUS ERYTHEMATOUS PATIENTS TO DETECT ANTI-RO FALSE-NEGATIVES

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Background: Systemic lupus erythematous (SLE) is an autoimmune disease characterized by immune system disruption with autoantibodies production. One of the upregulated autoantibodies is the specific to the Ro antigen, a ribonucleoprotein associated to a small RNA, constituted by the 52KDa and 60 KDa polypeptides, whose epitopes are mainly conformational. The routine detection method for anti-Ro is an enzyme immunoassay, however, is possible to obtain false-negatives for anti-Ro and this could be avoided by analyzing both subunits separately.

Objectives: To identify false-negatives for anti-Ro by analyzing both 52KDa and 60 KDa subunits separately, as well as to characterize if there are clinical or molecular differences in this subgroup of patients compared to anti-Ro negative cases.

Methods: A cross-sectional, observational study of patients diagnosed of SLE according to SLICC 2012 criteria was performed. In these patients a complete blood-test was made, and clinical data by personal interview was collected. INF1A, Anti-Ro, anti-Ro52KDa and anti-Ro60KDa levels where measured by colorimetric methods. Biostatistical analysis was performed with R 3.3.2.

Results: We selected 69 SLE patients with negative results for anti-Ro (2.34±4.17 U/mL) out of 142 total SLE patients. A total of 51 patients were negative for both anti-Ro subunits and 18 cases presented positive results (up to 20 pg/mL) for at least one of them. The subgroup of patients that exhibit simultaneously high levels of anti-Ro52KDa and anti-Ro60KDa have higher clinical activity compared to negative anti-Ro cases (75% of active patients against 41.2% in anti-Ro negative patients). However, no differences in the accumulated damage evaluated by SLICC score between negative anti-Ro cases and patients with at least one positive subunit were observed. We analyze serum levels of INF1A cytokine in the four groups of patients, and anti-Ro and subunits negative cases showed significant lower INF1A levels than the other patients (8.26±14.87 pg/mL and 26.62±40.71 pg/mL respectively; P=0.04). In addition, patients with high levels of anti-Ro52KDa subunit are those with the highest INF1A levels (anti-Ro 52+/anti-Ro60- 23.5±47.6pg/mL of INF1A; anti-Ro 52+/anti-Ro60+ 36.4±37.9pg/mL of INF1A).

Conclusions: In our anti-Ro seronegative patients, a 26% of false-negative cases were detected. These cases with high levels of almost one anti-Ro subunit showed significantly higher levels of INF1A in contrast to negative cases, supporting the fact that they are indeed a different group from the negative cases. Moreover, the high INF1A levels could be the reason of the observed differences in the clinical activity measured by SLEDAI score in both groups.

Disclosure of Interest: None declared

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SAT0280 A TEN-YEAR SURVIVAL ANALYSIS OF FILIPINO PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AT THE NATIONAL KIDNEY AND TRANSPLANT INSTITUTE (PHILIPPINES)

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Background: Systemic lupus erythematosus (SLE) is increasingly being diagnosed in our country. Despite the increasing number of patients, there are no studies describing their clinical profile at the time of diagnosis at the National Kidney and Transplant Institute (NKTI). This study aims to describe patients' initial clinical presentations, outcomes, and their survival rate within ten years.

Objectives: To determine the ten-year survival rate and presenting clinical manifestations of Filipino patients first diagnosed with SLE at the National Kidney and Transplant Institute (NKTI)

Methods: This is a retrospective cohort study using chart review of patients first diagnosed with SLE in 2004 followed up in the next ten years.