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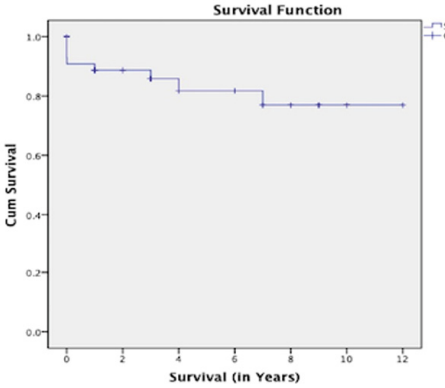
**Background:** Systemic lupus erythematosus (SLE) is increasingly being diagnosed in our country. Despite the increasing number of patients, there are no studies describing their clinical profile at the time of diagnosis at the National Kidney and Transplant Institute (NKTI). This study aims to describe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

**Results:** Eighty-five patients were first diagnosed with SLE wherein their average age was 28.10 years old ±12.03, 34.12% had hypertension, and 74.12% with renal involvement. The patients' cumulative 10-year survival was 75% with average survival time of 9.84 years. Moreover, biopsy- proven lupus nephritis had significantly longer survival time (mean=10.57 years, p=0.006) while those with cardiopulmonary manifestations had shorter survival (mean=0.71 years, p=0.030) as well as those on hemodialysis (mean=8.82 years, p=0.040). Lastly, eleven patients (12.94%) expired during the study period with active diseases and infections as the common causes of mortality.

**Figure 1. Kaplan-Meier Curve showing the survival of patients with SLE from 2004 to 2014** ***(Mean=9.842, Median=8.625)***




| Interval in years | Estimated Cumulative Survival Rate |
|---|---|
| 1 | 87% |
| 2 | 87% |
| 3 | 84% |
| 4 | 80% |
| 5 | 80% |
| 6 | 80% |
| 7 | 75% |
| 8 | 75% |
| 9 | 75% |
| 10 | 75% |

**Conclusions:** The 10-year survival rate of patients with systemic lupus erythematosus was 75% which was comparable to the findings from several countries. Although renal involvement was the most common initial manifestation, it did not significantly affect survival similar to prominent studies.
**Disclosure of Interest:** None declared
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## SAT0281 JOINT ACTIVITY INDICES CORRELATES WITH ULTRASONOGRAPHIC SCORE IN SLE PATIENTS WITH MUSCULO-SKELETAL INVOLVEMENT

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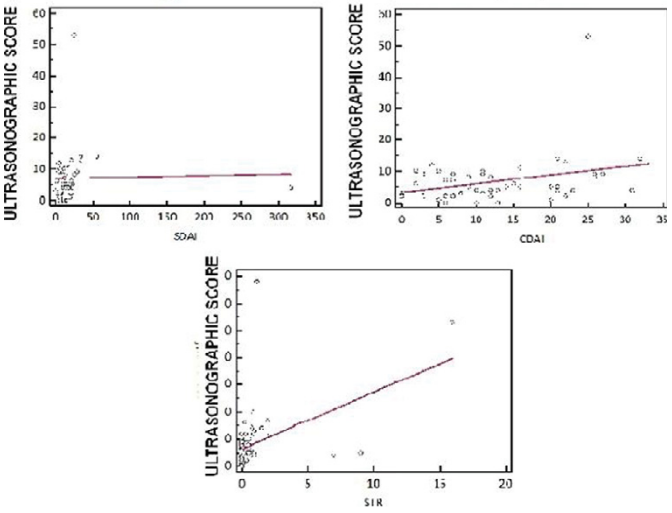
**Background:** Joint involvement represents one of the most frequent manifestations in Systemic Lupus Erythematosus (SLE) patients (incidence 69–95%), with different degrees of severity. Currently, there are no validated indices to evaluate joint involvement in SLE. Musculo-skeletal ultrasonography (US) has been widely applied in patients affected by different arthropathies. US-detected synovitis reflects the inflammatory state at the joint level, as demonstrated by the correlation with histological modifications. Furthermore, US-synovitis significantly correlated with disease activity indices, such as DAS28.
**Objectives:** In the present study, we aimed at assessing a correlation between the composite indices DAS28 (Disease Activity Score 28), CDAI (Clinical Disease Activity Index), SDAI (Simplified Disease Activity Index), STR (Swollen to Tender Ratio) and the US-detected synovitis in a cohort of SLE patients with joint involvement.
**Methods:** One hundred seven patients (M/F 7/100, mean age ±SD 48.4±13.8 years, mean disease duration ±SD 156.0±129.6 months) with at least one tender joint were enrolled. We registered the number of swollen and tender joint count (0–28) and the patient's/physician's disease activity on visual analogue scale (0–100). DAS28-ESR, CDAI, SDAI and STR were calculated. The US evaluation of 12 joints (I-V metacarpophalangeal, I-V proximal interphalangeal, wrist and knee bilateral) was performed to identify inflammatory features (synovial effusion, synovial hypertrophy and power Doppler) according with OMERACT definitions. These elementary lesions were scored according to a semi-quantitative scale (0 = absent, 1 = mild, 2 = moderate and 3 = severe). The sum of the semi-quantitative scores allows obtaining a total score of the patient's inflammatory state (0–216).
**Results:** As reported in Figure 1, by using the Spearman analysis, a positive correlation between US-score and SDAI (r=0.33, P=0.02), CDAI (r=0.29, P=0.03) and STR (r=0.42, P=0.0005) was identified. In particular, SLE patients with high disease activity according with STR value (>1) showed a higher US score (16.3±19.3) in comparison with moderate (7.7±4.5, P=NS) or low disease activity (7.1±7.9, P=0.02). Moreover, US score resulted significantly lower in patients with DAS28 remission compared to those with an active disease (4.5±4.4 *versus* 7.05±5.1, P=0.03; Mann-Whitney test).
**Conclusions:** We analyzed a large SLE cohort with articular involvement identifying a significant correlation between US scoreand the composite indices CDAI, SDAI and STR. Furthermore, US-score may be able to discriminate DAS28-remission patients. Taken together, these results suggest the ability of composite indices in detecting the joint activity in SLE patients and the possibility

**Figure 1:** correlation between US score and SDA, CDAI, STR




to use them in clinical practice to assess this frequent and potentially disabling manifestation.
**Disclosure of Interest:** None declared
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## SAT0282 AUTOIMMUNITY AND PREGNANCY: EVIDENCE FROM AN OBSERVATIONAL STUDY

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**Background:** Obstetrical APS is defined by positive aPLs and a history of one or more unexplained deaths of morphologically normal fetus at or beyond the 10th week of gestation (WG) or one or more consecutive spontaneous abortions before the 10th WG. Also one or more premature birth before 34 WG because of eclampsia, severe pre-eclampsia, or recognized features of placental insufficiency represent one of the diagnostic criteria (1). Infertility is defined as the inability of a couple practicing frequent intercourse and not using contraception to conceive a child after 12 months. Autoimmune diseases are not inclued among major causes of infertility, despite defective embryonic implantation could be considered an aspect of recurrent fetal losses in patients with positive antiphospholipid antibodies, due to their capabilities to reduce trophoblast prolipheration and growth (2).
**Objectives:** The aim of our study was to evaluate the prevalence of aPLs and pregnancy outcome in a population of women undergoing in vitro fertilization.
**Methods:** from December 2012 to December 2016, we selected 75 consecutive patients undergoing in vitro fertilization and evidence positive autoantibodies. Each of them was evaluated for genetic, anatomic, hormonal and infective causes of infertility. Moreover antinuclear antibodies (ANA), anticardiolipin antibodies (aCL), anti-β2-glycoprotein I (GP1), lupus anticoagulant (LA) and extractable nuclear antigens (ENA) profile were assessed.
**Results:** patients mean age was 41.38±4.87 years, ranging from 31 to 53 years. Prevalence of aPLs in our population was 68%. All women showed at least twice positive aPLs. aCL IgM and LA were the main antibody populations observed. ANA were positive in 50% of women, whereas SSA or SSB were positive in 4.17%. In 22.9% of patients a systemic autoimmune disease was newly diagnosed, mainly systemic lupus erythematosus. All patients with hystory of recurrent miscarriages and positive aPL were treated with subcutaneous low weight heparin plus daily oral acetylsalicylic acid (ASA 100 mg) (3). Full term pregnancy was obtained in 45.8% of patients.
**Conclusions:** Prevalence of aPLs in the general population is 1–5%, whereas in our selected series positive aPLs were detected in 68% of the patients, suggesting that prevalence of aPLs may be increased in infertile patients (4). Moreover, a systemic autoimmune disease was newly diagnosed in 22.9% of patients suggesting that paucisimptomatic disease can be underestimated. Finally we would suggest that treating autoimmune co-morbidities ameliorates implantation rates in women undergoing in vitro fertilization (5).
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