2022. Each patient received a complete clinical evaluation and review of recent laboratory tests by a rheumatologist expert in SLE, who classified patients in the following states: remission, LDA, active disease. Each category was mutually exclusive. The definitions of LLDAS and remission were also applied. LLDAS was defined, according to Franklyn et al., as SLEDAI-2k≤4 without major organ activity (including renal, cardiac and fever), no new disease activity, PGA≤1 (0-3), stable immunosuppressive therapy and prednisone equivalent dose up to 7.5 mg/day. Remission was defined according to the DORIS definition as clinical SLEDAI-2k=0 and PGA <0.5 in patients treated with standard immunosuppressive therapy and a prednisone equivalent dose ≤5 mg/die. In addition, patients fulfilling the definition of LLDAS but not that of remission (LLDAS/no remission) were identified. Cohen's kappa coefficient was used to assess the agreement between expert definition of LDA and LLDAS.

Results During the follow-up we enrolled 207 patients with SLE (mean±SD age 46±12.9 years, mean±SD disease duration 9 ± 6 years, 84.5% female). Among them, 154 (74.4%) were in LLDAS, of which 29 (14%) were in LLDAS/no remission, meaning an overlap between LLDAS and remission consisting of 125 (81.2%) patients. According to expert opinion, LDA was observed in 45 (21.7%) and remission in 128 (61.8%) patients. The agreement between expert opinion and LLDAS in discriminating active patients from LDA+remission was overall good (Cohen's k 0.67). However, definition of LLDAS failed to discriminate patient in LDA from patients in remission as identified by the experts (Cohen's k -0,02). We also analyzed the agreement after removing patients in remission from the pool of LLDAS (LLDAS/no remission): the agreement between expert definition of LDA and LLDAS/no remission markedly improved (Cohen's k 0,68). Notably, 9 out of 16 patients were in LDA according to the expert opinion but not to LLDAS due to minimal renal and serosal involvement

Conclusions Our analysis shows that LLDAS is effective in discriminating patients with active diseases from those in LDA/ remission. However, the great majority of patients in LLDAS are in remission and some patients with LDA are not identified by LLDAS. Thus, LLDAS should be implemented to capture all patients in LDA and to discriminate patients in LDA from those in remission.

PO.4.78 VALIDATION ANALYSIS OF THE PHYSICIAN GLOBAL ASSESSMENT (PGA) SCALE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS INCLUDED IN RELESSER-PROS REGISTRY

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Objective There is currently no agreement on which scale should be used to evaluate SLE disease activity. The aim of this study was to analyze the construct and criterion validity

of the physician global assessment (PGA), from 0 to 10, in the Spanish population, analyzing the correlation with SLEDAI and its ability to predict damage in order to promote its more widespread use.

Methods An observational, longitudinal and prospective design was performed. 1821 patients from the RELESSER-PROS registry and data from 5 annual consecutive visits were tested. Activity was analyzed using: PGA from 0 to 10 transformed to AM-PGA (mean-adjusted PGA), AM-SLEDAI (mean-adjusted SLEDAI); damage: SLICC/ACR Damage Index (SDI)) and health-related quality of life (QoL): EuroQoL 5D y Lupus Impact Tracker (LIT). The correlation between indices and their ability to predict damage progression (defined as any increase of 1 unit in SDI from baseline) and QoL was calculated. Pearson's or Spearman's correlation coefficients were calculated for each variable in comparison.

Results The correlation between PGA and SLEDAI was higher for lower PGA values and there was a correlation between AM-PGA and AM-SLEDAI, ranging 0.4 and 0.5. AM-SLEDAI explains a percentage of PGA variation that rises to 27.11% when introducing the number of domains affected by SLEDAI, in non-parametric model. AMS and AMP values are discrepant, especially for patients with low AMS and high AMP values and differs significantly in 3 domains: serological, neuropsychiatric, and renal. Excluding patients from the model, who were marked as discrepant, a significant linear relationship between AMS and AMP, around 0.5 shown up. Regarding damage, the correlation between AM-PGA, AM-SLEDAI and SLICC/ACR explained 13% of SDI variance. SLEDAI accounts for a higher percentage of SDI variance than PGA (10.18% vs. 5.65% in smoothed model), but both do it independently. Analysis the discrepant and non-discrepant patients showed a fairly discrete linear relationship, less than 3%, between the AMS and AMP with the LIT and the EQ5D6 for the non-discrepant patients, but this relationship was not found in discrepant patients.

Conclusion The correlation between PGA and SLEDAI is low and both should be used together. PGA could improve the assessment of disease activity and its use adds the possibility to improve damage prediction.

PO.4.79 NAILFOLD CAPILLARY CHANGES IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOUS

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Purpose This study aims to investigate nailfold capillary (NF) changes in patients with Systemic Lupus Erythematous (SLE), and its association with disease activities, autoantibodies, clinical symptoms.

Methods 52 patients were enrolled (7 m and 45 f), between 2015 and 2022, and underwent to NF. Alterations in capillary morphology, diameter, architecture and density were analyzed. CSURI index was calculated. Clinical symptoms and autoantibodies were reported. Disease activity was evaluated by SLE disease index (SLEDAI).

Results 46% of the enrolled patients showed non-specific pattern, 6% early scleroderma pattern (EAP), 18% likescleroderma pattern (LSP), 26% normal pattern. The most frequent microvascular alterations were tortuous capillary (81%), edema (54%), enlarged capillaries (30%), capillary hemorrhage (26%), prominent subpapillary plexus (7%), giant capillaries (6%), elongated capillaries (6%) and bushy capillaries (6%).

Considering disease activity, the patients in clinical remission highlighted in 60% of cases a normal NF pattern, in 40% non-specific pattern. The patients with moderate disease activity showed in 7% of cases EAP, and in 10% LSP. The patients with high disease activity evidenced in 6% of cases EAP, 41% LSP. The capillary abnormalities rates noticed in subgroups of patients relating disease activity, respectively low, moderate and high activity, were edema (20% vs 57% vs 65%), tortuous capillary (80% vs 80%, 94%), bushy capillaries (0% vs 4% vs 2%), elongated capillaries (0% vs 7% vs 6%), prominent subpapillary plexus (0% vs 2% vs 6%), capillary hemorrhage (40% vs 30% vs 18%), enlarged capillaries (0% vs 7% vs 6%).

Subdividing the LES patients on the basis of Raynaud's Phenomenon (RF) presence, those with RF, compared to patients without RF showed higher frequency of ESP (12,5% vs 0%) and LSP (25% vs 14%). The most frequent capillary alterations evidenced in patients with RF compared with patients without RF were edema (58% vs 53%), tortuous capillary (95% vs 75%), enlarged capillaries (42% vs 21%), giant capillaries (12% vs 0%), disorganization of capillary array (4% vs 0%), bushy capillaries (8% vs 3%) and prominent subpapillary plexus (8% vs 7%). The patients without RF, compared to patients with RF presented more often a normal pattern (36% vs 17%) and non-specific pattern (56% vs 44%). The most frequent capillary abnormalities highlighted in patients without RF were elongated capillaries (7% vs 4%) and capillary hemorrhage (28% vs 25%).

The patient with glomerulonephritis did not show significant differences compared to patients without glomerulonephritis.

Conclusions several capillary alterations were founded in SLE patients. The association between disease activity and capillary changes was highlighted. In particular, moderate and high disease activities were often correlated to altered capillary pattern such as like and EAP, and to capillary abnormalities such as enlarged capillaries. Also, patients with RF showed a higher association with capillary alterations than patients without RF.

PO.4.80 SIGNIFICANT CORRELATION BETWEEN ADJUSTED MEAN CLINICAL SLEDAI OVER TIME AND REMISSION DEFINED BY THE DORIS CRITERIA: RESULTS FROM A REGIONAL SWEDISH COHORT

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Purpose To compare disease activity and remission over time in well-characterized patients with systemic lupus erythematosus (SLE).



Abstract PO.4.80 Figure 1

Methods This study included patients diagnosed with SLE, meeting the 1982 American College of Rheumatology (ACR-82) and/or the 2012 Systemic Lupus International Collaborating Clinics criteria. All patients had been included in the regional SLE cohort 'Clinical Lupus Registry in Northeastern Gothia' (KLURING) during the years 2008-2020. Patients with ≥ 2 years of follow-up, ≥ 3 visits during the follow-up time and <3 years between successive visits were eligible for the study. Adjusted mean clinical SLE disease activity index 2000 (cSLEDAI; excluding items for low C3/C4 and anti-DNA binding) scores were calculated as an assessment of longitudinal disease activity in order to adjust for the different length of follow-up between successive visits for each patient.¹ Area under the curve of cSLEDAI between successive visits was added and divided by follow-up time for each patient. In addition, the percentage of visits where each patient achieved remission according to the DORIS criteria (cSLEDAI=0, Physician Global Assessment <0.5, prednisolone ≤5mg/day and/or stable immunosuppressant treatment) was identified. Spearman's correlation was applied between percent of visits in DORIS remission and adjusted mean cSLEDAI .

Results In total, 249 of 315 patients (79%) in KLURING met the inclusion criteria for this study. The median followup time was 8.5 years (range 2–11.5) and the median number of visits was 9 (range 3–33). The median value for the adjusted mean cSLEDAI was 0.35 (0–7.4). 116 patients (47%) achieved remission at \geq 70% of their visits. 43 subjects (17%) were in remission during their entire follow-up. A statistical significant correlation was observed between the percent of visits in remission and adjusted mean cSLEDAI (r: -0.79, p <0.001).

Conclusions The adjusted mean cSLEDAI as well as the DORIS criteria identified a subgroup of patients with longstanding low disease activity or remission during follow-up while considering the varying time between visits as well as Physician Global Assessment and treatment, respectively. Further studies are warranted to clarify the etiopathological mechanisms influencing differences in disease activity in SLE.

Figure 1. Distribution of adjusted mean cSLEDAI, expressed as median, by percentage of visits in DORIS remission.

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