

abnormalities have been observed. The aim of this study was to evaluate the capillaroscopic changes SLE patients and correlation with organ involvement, laboratory findings and disease activity.

Methods A retrospective study was performed including SLE patients followed in outpatient rheumatology clinic; healthy controls with primary Raynaud's phenomenon (RP) were also enrolled in the study. Socio-demographic and clinical data were collected. Descriptive analysis was performed; p -value ≤ 0.05 was statistically significant.

Results 50 SLE patients (47 female; 3 men) and 50 healthy controls (42 female; 8 men) are included, averaging 47.1 ± 13.6 and 50.3 ± 18.8 years old, respectively ($p=0.33$). Mean disease duration in SLE patients was 10.6 ± 7.7 years and the most frequent involvements were hematological (64%), cutaneous (64%) and musculoskeletal (56%). Only 18% of patients had RP. All patients with SLE had positive ANAs (36% anti-dsDNA, 32% anti-Ro60, 26% anti-Ro52, 10% anti-SSB, 4% anti-RNP and 4% anti-Smith) and 20% had positive antiphospholipid antibodies. 76% of patients were in remission and the rest had minimal activity according to SLEDAI-2K. In the capillaroscopy findings, SLE patients showed a normal pattern and morphological alterations including tortuous capillaries (30%) and presence of hemorrhages (10%). All controls had normal pattern with tortuous capillaries (5%) and with hemorrhages (2%). In SLE patients, we found statistically significant differences regarding morphology changes in NVC and hematological and nervous system involvement ($p=0.04$ and $p=0.01$, respectively) as well as the SLEDAI score ($p=0.04$).

When comparing the SLE patients and healthy controls, significant differences were found in the changes in capillary morphology, Raynaud's phenomenon, and the presence of positive antinuclear antibodies in two groups ($p < 0.05$).

Conclusions As in previous studies, our study showed that nonspecific changes (abnormal morphology, tortuous capillaries and haemorrhages) in NVC are frequent in SLE patients. Some changes seem to be associated with disease activity, but studies with larger sample sizes are warranted and may be beneficial to assess its evolution over time to understand its impact on the clinical outcome.

PO.8.185 MICROVASCULAR CHANGES IN SYSTEMIC LUPUS ERYTHEMATOSUS AND SYSTEMIC SCLEROSIS

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Purpose Microvascular changes play central roles in the pathophysiology of systemic sclerosis (SSc) and systemic lupus erythematosus (SLE). Nailfold video-capillaroscopy (NVC) is a non-invasive and inexpensive tool that allows assess the microvascular involvement. In the last two decades, capillaroscopic patterns specific to SSc have been defined but in SLE only normal patterns and a variety of 'non-specific' capillary abnormalities have been observed. The aim of this study was to evaluate the association between capillaroscopic changes, organ involvement and laboratory findings SLE and SSc patients.

Methods A retrospective study was performed including SLE and SSc patients followed in outpatient rheumatology clinic. Socio-demographic and clinical data were collected. Descriptive

analysis was performed; p -value ≤ 0.05 was statistically significant.

Results 31 SLE (29 female; 2 men) and 24 SSc (19 female; 5 men) patients are included, averaging 46.96 ± 13.80 and 58.42 ± 11.38 years old with a mean disease duration was 10.93 ± 7.65 and 3.58 ± 2.63 years, respectively. In SLE patients, the most frequent involvements were hematological and cutaneous (70.1%). Only 19.4% of patients had Raynaud's phenomenon. All patients had positive ANAs (22.7% anti-dsDNA, 22.6% anti-Ro60, 12.9% anti-Ro52, 6.5% anti-SSB and 3.2% anti-Scl70) and 10% had positive antiphospholipid antibodies. In the capillaroscopy findings, all patients showed a normal pattern and alterations were observed in the morphology of the capillaries in 35.5% with tortuous capillaries and 6.5% with the presence of hemorrhages. We found statistically significant differences regarding morphology changes in NVC and hematological involvement as well as the SLEDAI score ($p=0.044$). In the case of SSc, 29.2% had the limited involvement and all patients had Raynaud's phenomenon (45.8% had a history of digital ulcers). Also, all patients had positive ANAs (58.3% anti-centromere, 25% anti-Scl70, 12.5% anti-RNA polymerase III and 8.3% anti-SSA) In capillaroscopy findings, all patients had a scleroderma pattern (50% early, 33.3% active and 16.7% late). History of digital ulceration, pulmonary involvement and positivity for anti-Scl70 were found to be statistically correlated with SSc pattern.

When comparing SSc and SLE groups, significant differences were found between the pattern of NVC and Raynaud's phenomenon, as well as the presence of anti-Scl70.

Conclusions Microvascular changes are a prominent feature in both diseases and their assessment will be important in both diagnosis and follow-up. Findings in patients with SSc have already been demonstrated in previous studies but studies with larger sample sizes are warranted in patients with SLE with standardized capillaroscopic to clarify the role of NVC changes and the link between these and clinical or laboratory features.

PO.8.186 SLE-T2T – A DIGITAL TREAT-TO-TARGET CLINICAL DECISION SUPPORT SYSTEM FOR THE MANAGEMENT OF SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS: DEVELOPMENT AND USABILITY EVALUATION

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Purpose We aimed to design and develop a first prototype of SLE-T2T, an online clinical decision support system (CDSS) tool, and test its usability for the implementation of a treat-to-target strategy in the management of patients with SLE.

Methods SLE-T2T was conceived as a web-based application with a specific task – to generate appropriate treatment advice based on entered patients data. A general sketch of the program was made, and general consensus was achieved with regards to the desired functionalities. In the development

phase, a beta version of SLE-T2T was conceived using a free integrated development environment, and based on Javascript, HTML and CSS. After, the system was hosted temporarily on the website of the Amsterdam Rheumatology & Immunology Center, to be accessible for the participants in evaluation phase. Finally, a System Usability Score Survey (SUS) was chosen as the usability test tool, given its simplicity and advantages; coupled with unstructured feedback collected using the think aloud method to determine whether the CDSS was user-friendly, comprehensible, easy-to-deliver, and workflow-oriented.

Results The SLE-T2T web-based system developed, consisted of: (1) an input scheme with the set of indexes and scores existing for the measurement of SLE disease activity (cSLE-DAI-2K, SLEDAI-2K, PGA score) as well as the patients' medication; (2) a rule-based interface that collects and processes

patients data, and (3) an output dashboard with the generated set of recommendations tailored for the patients clinical state and aiming to reach a pre-established target of treatment (figure 1). In the interim usability and acceptability evaluation, 7 participants completed the SUS survey. The mean usage time for SLE-T2T was 8 minutes. On a scale of 0 (worst) to 100 (best), the median SUS score of SLE-T2T was 79, categorizing the application as 'good' and indicating the need for minor improvements to the design necessary to reach a final version for later implementation in a treat-to-target pilot study.

Conclusions SLE-T2T is the first eHealth tool to be designed for the management of SLE patients in a treat-to-target context. The SUS score and unstructured feedback showed high acceptance of this digital instrument.