Table 1. Clinical and laboratory characteristics with anti-Ro52α

	anti-Ro52α (+) N=46	anti-Ro52α (-)) N=183	P value
age	54.6 ± 14	53.1 ± 19	0.89
sex (female)	35 (76%)	126 (69%)	0.37
cancer	6 (13%)	43 (23%)	0.15
ILD	32 (76%)*	78 (49%)**	0.0016
creatinine	974.3***	1274****	0.40
kinase			
MSA			
MDA5	12 (26.1%)	36 (19.6%)	0.41
ARS	19 (41%)	13 (7.1%)	<0.00001
TIF1γ	4 (8.7%)	37 (20%)	0.084
Mi-2	1 (2.1%)	12 (6.5%)	0.47
MJ	1	11 (6%)	0.46
SAE	2	5 (2.1%)	0.63
PM/ScL	1	5 (2.1%)	1
SRP	0	4	0.58
non	6 (13%)	56 (30%)	0.016

*4 patients excluded with insufficient data. **23 excluded. ***2 excluded. ****16 excluded.
ILD: interstitial lung disease. MSA: myositis specific autoantibodies

Table 2. Clinical and laboratory characteristics in patients with anti-Ro52α and anti-Ro52β

	anti-Ro52α with anti-Ro52β (N=26)	Anti-Ro52α without anti-Ro52β (N=20)	P value
age	59.8±12.5	47.85±13.5	0.009
sex (female)	21 (81%)	14 (70%)	0.49
cancer	4 (15%)	2 (10%)	0.68
creatinine kinase	1267.52	588.4	0.065
ILD	17 (71%) *	16 (89%)**	0.25
MSA			
MDA5	5	7	0.31
ARS	9	10	0.74
TIF1	3	1	0.62
SAE	1	1	1
Mi-2	1	0	1
MJ	1	0	1
PM/ScL	0	1	0.45
non	6	0	0.03

*4 cases excluded with insufficient data. **2 cases excluded.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.1898

FRI0340 LONG-TERM FOLLOW-UP OF PRIMARY RAYNAUD'S PHENOMENON COHORT OF 248 PATIENTS

Francisco Miguel Ortiz Sanjuan*, Elvira Vicens Bernabeu, Cristina Alcañiz Escandell, Inés Cánovas Olmos, Inmaculada Chalmeta Verdejo, Marta De la Rubia Navarro, Jorge Juan Frago-Gil, Roxana Gonzalez Mazario, Luis Gonzalez Puig, Elena Grau García, Jose Ivorra Cortés, Isabel Martínez Cordellat, Carmen Nájera Herranz, Rosa Negueroles Albuixech, Jose Eloy Oller Rodríguez, Cristóbal Pávez Perales, Jose Andrés Román Ivorra. *Rheumatology Department. HUP La Fe, Valencia, Spain*

Background: Raynaud's phenomenon (RP) is frequently associated with the presence of scleroderma or other connective tissue diseases (CTD). Identify the presence of secondary RP is important to perform an adequate therapeutic management and to achieve the early control of these patients. Nailfold capillaroscopy is safe, economic, easy to perform and has proven to be useful in identifying patients with secondary RP.

Objectives: To assess a long-term follow-up primary RP patient's cohort.

Methods: Retrospective observational study of a wide and unselected series of patients diagnosed as primary RP from a single university hospital from January 2012 to December 2018. Patients were classified as primary RP after the presence of CTD at the onset was excluded.

Results: We studied 248 patients (210 women/38 men), with a mean age of 46.3±15.2 years (range 15-88). After a mean follow-up period of 57.2±21.6 months, 9 (3.6%) patients were diagnosed of a CTD. The remaining 239 (96.4%) patients continued classified as primary RP. The main pathologies observed after follow-up were: Scleroderma/Systemic sclerosis (n=3), Systemic Lupus Erythematosus (n=3), Rheumatoid arthritis (n=1), Sjogren's syndrome (n=2). The main capillaroscopic patterns observed were: Normal (n=175), Unspecific (n=64), Scleroderma pattern (n=3) and suggestive of other rheumatic diseases pattern (n=6). All the patients who developed a CTD during follow-up showed changes at

successive nailfold capillaroscopic examinations. 28 of 239 patients who remained primary RP showed minor changes at successive nailfold capillaroscopy. The main capillaroscopic changes detected on this group were: Presence of capillary tortuosity (n=6), presence of a decreased capillary density (2) and the presence of capillary bleeding (n=20). Antinuclear antibodies (ANA) were positive at the onset in 46 patients (16.9%) and after follow-up in 44 (17.7%) patients.

Conclusion: After a mean follow-up period next to 5 years, most of our primary RP patients remained free of CTD. A minority of our patients showed changes at nailfold capillaroscopy exam or positivity of ANA.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5989

FRI0341 LOWER URINARY TRACT SYMPTOMS PREVALENCE IN SYSTEMIC SCLEROSIS PATIENTS: RESULTS FROM A COMPREHENSIVE ANALYSIS

Greta Pacini¹, Amelia Chiara Trombetta¹, Federica Goegan¹, Sabrina Paolino¹, Carmen Pizzorni¹, Elisa Alessandri¹, Massimo Patané¹, Emanuele Gotelli¹, Giorgia Ferrari¹, Francesco Cattelani¹, Massimo Ghio¹, Andrea Casabella¹, Vanessa Smith², Maurizio Cutolo¹. ¹IRCCS San Martino Polyclinic Hospital, Research Laboratory and Academic Unit of Clinical Rheumatology, Department of Internal Medicine, University of Genova, Genova, Italy; ²Ghent University Hospital, Department of Internal Medicine, Belgium Unit for Molecular Immunology and Inflammation, VIB Inflammation Research Center (IRC), Ghent, Belgium

Background: Lower urinary tract symptoms (LUTS) are a seldom-reported manifestation of systemic sclerosis (SSc). Although LUTS have been described in SSc patients with a higher prevalence than in the general population, no controlled studies have been reported to date [1-3].

Objectives: To compare LUTS prevalence and severity in SSc patients and in healthy subjects and mainly to explore their association with SSc clinical and diagnostic parameters.

Methods: This study evaluated 42 SSc consecutive patients (median age 61 years, range 21-85) and 50 matched healthy subjects (median age 57 years, range 28-93). SSc diagnosis was based on the 2013 American College of Rheumatology (ACR)/European League Against Rheumatism (EULAR) criteria. LUTS were assessed through validated self-reported questionnaires derived from the International Conference on Incontinence (ICIQ-FLUTS, ICIQ-MLUTS and ICIQ-OAB) [4]. General comorbidities and/or medication potentially related to LUTS, as well as lower urinary tract infections, were evaluated in order to exclude confounding factors. Non-parametric tests and chi-squared test were performed to compare LUTS distribution, namely of urinary incontinence (UI) and overactive bladder (OAB), in the two populations, then linear and logistic regressions were used to test the association between SSc disease and LUTS prevalence and severity. In SSc population, linear and logistic regressions were performed to test the association between LUTS and SSc variables, including nailfold videocapillaroscopy (NVC) patterns ("Early", "Active", "Late"), SSc-related autoantibodies and dual X-ray absorptiometry (DXA) parameters. Multivariate analysis was performed to adjust the associations for potential confounders. A p value < 0.05 and a confidence interval (CI) of 95% were considered statistically significant.

Results: SSc patients showed significantly higher prevalence and severity of UI and OAB than healthy controls (p< 0.005, p< 0.01). SSc was a strong predictor of LUTS, independent of demographic data, comorbidities and treatments (OR 5.57, 95% IC 1.64-18.88). In SSc patients sarcopenia positively correlated with OAB (p< 0.001) and reduced bone mineral density (BMD) positively correlated with OAB (p< 0.05) and UI (p= 0.001). UI positively correlated with anti Scl70 Abs (p< 0.05) and cyclosporine treatment (p= 0.001) and negatively with anti RNA polymerase III Abs (p< 0.05); OAB positively correlated with calcinosis (p< 0.005) and negatively with methotrexate treatment (p< 0.05). NVC "Active" and "Late" patterns were predominant among SSc patients presenting LUTS (both UI and OAB), although not any statistical correlation was found.

Conclusion: For the first time urinary tract involvement was found to be significantly higher in SSc patients than in healthy matched controls. In addition, sarcopenia, bone damage and calcinosis appeared significantly correlated with LUTS, suggesting a possible interplay.

REFERENCES:

- [1] John G, et al. Arthritis Care Res. 2018;70:1218-27.
- [2] Sanchez K, et al. Press Med. 2016;45(4):e79-89.
- [3] Adler BL, et al. J Rheumatol. 2018;45:1145-52.
- [4] Abrams P, et al. J Urol. 2006;175:1063-6.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5451

FRI0342 EROSIIVE OSTEOARTHRITIS IN PATIENTS WITH SYSTEMIC SCLEROSIS

Cristina Pijoan Moratalla, Jaime Arroyo Palomo, Carlos De la Puente Bujidos.
Hospital Universitario Ramón Y Cajal, Rheumatology, Madrid, Spain

Background: Erosive osteoarthritis (EO) is a rare but aggressive variant of hand osteoarthritis. Its prevalence in Europe is 3.3% in men and 9.9% in women, affecting 15.5% of patients with hand osteoarthritis^{1,2}. EO causes a significant loss of function in the hands, with more severe inflammatory signs and affecting almost exclusively the PIP and DIP joints, usually avoiding the TM and MCP. In systemic sclerosis (SSc), hands are commonly affected with pain and joint deformity that, added to sclerodactyly and the presence of digital ulcers, produce an important functional limitation. It has not been established yet whether the presence of the disease determines an increased risk for the development of erosive osteoarthritis.

Objectives: To determine the frequency of EO in patients with SSc seen in a tertiary hospital in Madrid and to compare it with the frequency observed in the large cohorts of healthy population (Framingham study¹). Secondly analyze both the clinical and analytical factors that may be related to the presence of EO in these patients.

Methods: A descriptive, observational cross-sectional study was conducted. We included all patients with a diagnosis of systemic sclerosis attended in our Rheumatology Unit. A database was created including clinical and epidemiological data and all the available imaging tests to assess the presence of findings compatible with EO in interphalangeal hand joints were reviewed. Acroosteolysis lesions were not considered as EO. Finally, a descriptive analysis was carried out.

Results: The prevalence of EO in our cohort of SSc patients, although low, is higher than the estimated in general healthy population according to the large European studies, with 8.16% (12/147) of the patients affected. All the patients with EO were female, with a higher age of presentation of SSc compared to patients without EO (66.72 vs 50.72 years). EO was more prevalent in patients with limited skin involvement (75% vs 62%) and they had a higher frequency of telangiectasias in the typical locations. Likewise, patients with EO had more frequently positive AMA (25% vs 8.88%) and calcinosis (33% vs 17.77%). The frequency of ANA, Raynaud's phenomenon and interstitial lung disease was similar in both groups. No patients with positive Ro or La presented EO.

Conclusion: Although it is an uncommon variant of hand osteoarthritis, in our cohort a higher prevalence of EO was observed in patients with SSc compared to the healthy general population. In our group, the most associated risk factors were female sex, advanced age at the diagnosis of SSc, the presence of AMA and calcinosis, regardless of its location. The frequency of pulmonary involvement and Raynaud's phenomenon was similar in both groups.

REFERENCES:

- [1] I.K. Haugen, M. Englund, P. Aliabadi, et al. Prevalence, incidence and progression of hand osteoarthritis in the general population: The Framingham Osteoarthritis Study. *Ann Rheum Dis*, 70 (2011), pp. 1581-1586.
- [2] W.Y. Kwok, M. Kloppenburg, F.R. Rosendaal, et al. Erosive hand osteoarthritis: Its prevalence and clinical impact in the general population and symptomatic hand osteoarthritis. *Ann Rheum Dis*, 70 (2011), pp. 1238-1242.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.3398

FRI0343 EVALUATION OF CAROTID HEMODYNAMIC PARAMETERS AND PLAQUES BY DOPPLER ULTRASOUND IN PATIENTS WITH SYSTEMIC SCLEROSIS

Isidro Sanz Pérez¹, Fernando Martínez-Valle¹, Alfredo Guillén del Castillo¹, Olimpia Orozco-Galvez¹, Eduardo L. Callejas-Moraga², Vicent Fonollós-Pla¹, Carmen Pilar Simeón-Aznar¹. ¹Vall d'Hebron, Internal Medicine. Unit of autoimmune diseases, Barcelona, Spain; ²Hospital Parc Taulí, Internal Medicine. Unit of autoimmune diseases, Sabadell, Spain

Background: Carotid Doppler-ultrasound is useful for the detection of sub-clinical atheromatosis(1), and also for the evaluation of hemodynamic characteristics of carotid arteries(2).

Objectives: The aim of this study is to evaluate the hemodynamic parameters of carotid arteries and its relation with vascular related Systemic Sclerosis (SSc) complications and subclinical atheromatosis.

Methods: 157 patients with SSc of the cohort of Vall d'Hebron Hospital were included according to the ACR/EULAR 2013 criteria and LeRoy classification.

The left and right common carotid arteries (CCA), bulb and internal carotid arteries (ICA) were scanned using Doppler ultrasound for the detection of plaques and for the measurement of the Peak Systolic Velocity (PSV), End Diastolic Velocity (EDV), Pulsatility Index (PI), Resistance Index (RI) and Systole/Diastole ratio (S/D), using the software incorporated in GE Healthcare's Vivid I equipment.

Results: 157 patients were included, 132 women (84.1%), the mean age was 56 years old (range 20-83) and the mean of years of disease evolution was 19 years (range 3-57). 64.2% were SSc limited subset, 20.9% SSc diffuse subset, 9.5% SSc sine scleroderma and 4.7% early SSc subset. 49.3% had digital ulcers, 41.9% had interstitial lung disease and 14.2% had pulmonary hypertension.

There were no statistically significant differences in hemodynamic parameters in relation to Raynaud's phenomenon, digital ulcers or pulmonary hypertension.

Seventy-five patients (47.7%) had carotid plaques. Patients with plaques had lower CCA PSV (66.8cm/s vs 76.7cm/s, $p < 0.01$, CI 4.62-14.5), lower CCA EDV (15.3 cm/s vs 19.99cm/s $p < 0.01$, CI 2.88-6.49), higher CCA PI (1.69 vs. 1.55, $p < 0.05$; CI 0.02-0.26) and higher CCA RI (0.77 vs 0.73 $p < 0.01$ CI 0.02-0.05). These patients also had lower ICA EDV (22.9cm/s vs 26.5cm/s, $p < 0.01$; CI 1.01-6.11), higher ICA PI (1.43 vs 1.32, $p < 0.05$ CI 0.01-0.22) and higher RI 0.71 vs 0.68 $p < 0.05$ CI 0.01-0.05), without statistically significant differences in ICA PSV (79.75cm/s vs 84.24cm/s $p: 0.21$) nor in the ratio PSV/EDV.

Ratio ICA PSV/CCA PSV was calculated, without showing significant differences in the presence of plaques or vascular manifestations of the SSc.

The PSV greater than 120m/s, as an isolated measure, did not show statistically significant differences related to the presence of plaques. The PSV greater than 150 showed statistically significant differences ($p < 0.01$, CI 0.05-0.23), showing a large specificity 0.98 but a very low sensitivity 0.15 for the detection of plaques.

Conclusion: In our study we have not found relation between carotid hemodynamic parameters and microvascular related SSc complications such as Raynaud's phenomenon, the presence of digital ulcers or pulmonary hypertension.

Patients with SSc and atheromatous disease have a characteristic carotid hemodynamic profile consisting in lower PSV and EDV, and higher PI and RI, both at CCA and at ICA. The presence of increased PI and RI in patients with plaques, could suggest a primary damage of the vascular wall in patients with SSc. More studies are needed to determine if these data are the cause or a consequence of the presence of plaques.

In our study the PSV greater than 150 cm/s isolated shows a high specificity for the presence of plaques.

REFERENCES:

- [1] Sanz Pérez I. et al. Subclinical cardiovascular disease and Systemic Sclerosis: A comparison between risk charts, quantification of coronary calcium and carotid ultrasonography. *Autoimmun Rev*. 2018;17(9):900-5.
- [2] Staub D. et al. Prediction of cardiovascular morbidity and mortality: Comparison of the internal carotid artery resistive index with the common carotid artery intima-media thickness. *Stroke*. 2006;37(3):800-5.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.4789

FRI0344 SEXUAL FUNCTION IN GERMAN WOMEN WITH SYSTEMIC SCLEROSIS COMPARED TO WOMEN WITH SYSTEMIC LUPUS ERYTHEMATODES AND EVALUATION OF A SCREENING TEST

Marc Schmalzing¹, Lena Friederike Nau², Michael Gernert¹, Eva Christina Schwaneck¹, Sebastian Saur², Hans-Peter Tony¹, Melanie Henes³, Jörg Henes². ¹University Hospital Würzburg, Rheumatology/Clinical Immunology, Würzburg, Germany; ²University Hospital Tübingen, Rheumatology, Tübingen, Germany; ³University Hospital Tübingen, Gynaecology, Tübingen, Germany

Background: Few studies have been conducted to address the impact of systemic lupus erythematoses (SLE) or systemic sclerosis (SSc) on sexual function (1,2), and so far none in Germany.