Abstract SAT0352 – Table 1. Hazard ratio (HR) and 95% confidence intervals (CI) comparing the mortality in idiopathic inflammatory myopathy (IIM) patients identified in the National Patient register between 2002 and 2011 and in an individually matched general population comparator. Overall mortality and stratified by underlying cause of death and time since IIM diagnosis

	IIM duration categories HR (95% CI) Deaths per 1,000 person years IIM patients/comparators			
	<1 year	1–<5 years	5–10 years	>10 years
Overall	10.3 (7.5–14.2) 110.8/ 11.6	3.2 (2.5–4.0) 51.2/19.6	2.6 (1.8–3.6) 48.2/24.7	2.4 (0.6–9.2) 42.1/27.7
Cardiovascular disease	5.3 (2.8–9.9) 21.9/4.4	2.3 (1.6–3.5) 14.9/8.0	2.4 (1.4–4.2) 16.7/10.0	6.49 (1.1–40.0) 28.1/13.4
Cancer	12.4 (7.4–20.8) 46.7/4.2	3.2 (2.1–4.8) 15.4/5.5	3.1 (1.6–6.0) 12.8/5.6	1.5 (0.1–14.9) 14.0/6.7
Pulmonary disease	22.49 (4.2–119.7) 7.3/0.1	5.2 (2.5–10.8) 6.1/0.3	2.4 (0.7–8.5) 3.0/1.0	- -

was noted within a year of diagnosis due to pulmonary disease, cancer and cardiovascular disease which calls for extra vigilance with respect to comorbidities during the first year of IIM diagnosis.

Disclosure of Interest: None declared

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SAT0353 SMALL AIRWAYS INVOLVEMENT IN SCLERODERMA PATIENTS: RESULTS OF A CASE-CONTROL STUDY

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Background: Interstitial lung disease (ILD) and pulmonary hypertension are the leading cause of morbidity and mortality in systemic sclerosis (SSc). Although a ventilatory obstructive pattern, due to large airways impairment, has been rarely observed in SSc, a potential involvement of smaller airways (SA) has been suggested in previous reports. Recently, impulse oscillometry (IOS), a non-invasive forced oscillation technique, has been advocated as a valuable diagnostic tool for a sensitive assessment of SA.

Objectives: The main objectives of the present study was to investigate the prevalence of SA dysfunction by IOS in SSc patients compared to healthy controls, and to evaluate the correlation between SA dysfunction and selected radiological and clinical disease-related features.

Methods: Consecutive SSc patients were included in the present study according to eligibility criteria; controls were health volunteers. Both cases and controls underwent IOS measurements; cases also underwent pulmonary function tests and St. George's respiratory questionnaire. Radiological features were assessed on the latest chest high resolution computed tomography (HRTC) scan available in the twelve months before study enrolment, evaluating for both SA signs of disease and ILD. A SA involvement at IOS was defined as R5-R20 $\geq$0.07 kPa/L/sec. Odds ratios and 95% confidence intervals for the IOS value was computed using multiple logistic regression models. Correlation between SA dysfunction and selected parameters were assessed using Pearson's correlation coefficient.

Results: 92 cases (M/F 14/78, mean age 57.06) and 84 controls (M/F 15/69, mean age 54.28) were included in the present study. The R5-R20$\geq$0.07 kpa/L/sec was found in 20.65% of cases and in 3.57% of controls. The OR was 7.027 (95% CI 1.99–24.72, p<0.01). This value did not significantly change after the adjustment for confounding variables (OR a* 7.091). Correlations between R5–20 $\geq$0,07 kPa/L/s and selected parameters showed a significant inverse association with vital capacity (FVC) and forced expiratory volume in first second (FEV1) and a direct correlation with pulmonary artery systolic pressure estimated. With reference to cutaneous subtype a SA dysfunction was more prevalent in the limited form compared to the diffuse, respectively in 23% and 12%. Radiologic HRCT assessment of SA pathological features and ILD extent were provided for 77 patients: 19 (24.7%) presented at least one sign of SA disease. An underlying ILD was detected in 40 patients, characterized by NSIP pattern in 37.

Conclusions: A significant involvement of SA was found in a substantial proportion of SSc patients, compared to healthy controls. Moreover, this seemed to be associated with a more severe functional obstructive and restrictive impairment, and with higher PAPs values. Therefore, our findings suggests that SA may be a potential, less known, target of disease, and further studies are needed to assess prognostic and therapeutic implications of this pathologic feature.

Disclosure of Interest: None declared

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SAT0354 NAILFOLD VIDEOCAPILLAROSCOPY AND RAYNAUD'S PHENOMENON IN A COHORT OF MESTIZO LATIN AMERICAN PATIENTS: A PRELIMINARY OBSERVATIONAL STUDY

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Background: The prevalence of Raynaud's phenomenon (RP) has been reported between 3–22%. When associated with systemic autoimmune diseases (SAD), especially systemic sclerosis (SSc), it is the sentinel event of irreversible organic damage. Nailfold videocapillaroscopy (NVC) is a non-invasive and safe procedure that allows *in vivo* observation of the microcirculation. Between 15–20% of patients who have RP with videocapillaroscopic alterations and certain autoantibodies will develop a SAD over two years. In addition, 90% of individuals with SSc and 85% with mixed connective tissue disease (MCTD) had RP as the first symptom.

Objectives: To evaluate the role of NVC in the differential diagnosis of RP, as well as in the early detection of SAD, in a cohort of Colombian patients.

Methods: A prospective, longitudinal, analytical study was conducted in subjects with RP, over 18-year-old, not active smokers, without previous connective tissue disease, secondary causes or aggravating factors. Optilia NVC with OptiPix software was used (Optilia Instruments; Sollentuna, Sweden). Qualitative variables are described by means, as well as absolute and relative frequencies; quantitative variables, according to the distribution of data, were reported by means or median, with standard deviation (SD) and interquartile range (IQR), respectively. We are reporting the baseline characteristics of these individuals.

Results: Fifty-eight individuals were included; 91.4% were female. The mean age was 40.9 years (SD: 14.1). RP was biphasic in 63.6% of the patients, with a median of 30 episodes per month (IQR: 8–30). In 41 subjects (available data), antinuclear antibodies were positive; the most common patterns were: speckled (41.5%) and centromere (26.8%). The median of erythrosedimentation rate (ESR) was 9 (IQR 4–13). Ten individuals (19.2%) were diagnosed with SAD in the first NVC: Seven patients with limited SSc, two with MCTD, and one with diffuse SSc. The patterns observed in the individuals with SSc were: early (n=3), active (n=3), late (n=2), and minor and unspecific abnormalities in subjects with MCTD (one each). The most frequent NCV alterations in subjects with SAD were: megacapillaries (n=10), microhemorrhages (n=10), avascular zones (n=8), neovascularization (n=6), and capilar disorganization (n=6). In these subjects, the mean capillary diameter was 76.7±33.9 mm; the median of capillary number per mm was 7 (IQR: 6–8).

Conclusions: The frequency of systemic autoimmune disease was similar to the published reports in the literature. We highlight the following aspects: 1) The normal erythrosedimentation rate in subjects with a rheumatologic diagnosis, a particular finding when compared to previous data; 2) The important percentage of subjects with a specific diagnosis in the first nailfold capillaroscopy; one possible explanation could be a underdiagnosed disorder; this fact could be possibly demonstrated by the large capillary diameter found.

References:

[1] Ingegnoli F et al. Arthritis Rheum. 2008; 58 (7): 2174–82.
[2] Ingegnoli F et al. Rheumatology 2010; 49 (4): 797–805.

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SAT0355 NEUROPATHIC PAIN: IS IT AN UNDERESTIMATED SYMPTOM IN SYSTEMIC SCLEROSIS?

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Background: Pain is one of the most common symptoms in SSc patients, yet not considered in the assessment of disease severity. Former studies have shown that pain has a neuropathic component; however there is still lack of evidence about its distribution in the body regions and the direct effect of neuropathic pain on the quality of life (QoL).

Objectives: We aimed to investigate the frequency of neuropathic pain syndrome (NPS) and to evaluate its interference with the quality of life in SSc patients.

Methods: Diffuse and Limited SSc patients diagnosed by *American College of Rheumatology* 2013 criteria were included in the study. Pain was evaluated with *Visual Analogue Scale* (VAS); painful body regions and pain intensity with *Brief Pain Inventory* (BPI); presence of neuropathic pain with *The Leeds Assessment of Neuropathic Symptoms and Signs* (LANNS) questionnaire; disease activity with *Medsger Disease Severity Scale* and QoL with *Short-form 36* (SF36). Multiple regression analysis was used to assess the associations of NPS with sociodemographic and clinical factors.

Results: One hundred twenty patients were included in the study (mean age 53.64±11.44 years, female/male 83.3%>16.7%). Total pain frequency was found 69.2% and NPS was 35.9% in the whole patient group. Mean VAS in the

group of patients with and without NPS were 5.44±2.03, 3.45±1.82; respectively ($P<0.001$). Pain was most frequently seen in wrist-hand (50.6%) and ankle-foot (43.4%) regions; albeit, NPS rates were highest in face (94.4%), lower leg (87.5%) and gluteal (78.6%) regions. SF 36 scores were lower in patients with NPS than the patients without NPS but the difference has not reached to a statistically significant level ($P>0.05$). The most associated factors with NPS were Medsger Disease Severity Score for muscle and drug consumption of the patient.
Conclusions: According to our results, high frequency of NPS is seen in SSc patients, and NPS is associated with low QoL. The highest rates of NPS presence were seen in face, gluteal and lower leg regions of the body. Differential diagnosis of NPS is important to consider right treatment options and accurate management of pain in all rheumatologic diseases including SSc.
Disclosure of Interest: None declared
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SAT0356 VIDEOFLUOROSCOPY SWALLOW STUDY IN PATIENTS WITH SYSTEMIC SCLEROSIS. CORRELATION WITH CLINICAL PATTERNS

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Background: Systemic Sclerosis (SSc) is a chronic autoimmune disease characterized by proliferative vascular lesions and progressive fibrosis of skin and internal organs, including the gastrointestinal tract. Gastrointestinal involvement is a very frequent complication, reported in up to 90% of SSc patients in both limited (lSSc) and diffuse (dSSc) cutaneous forms, and it is one of the earliest events.
Objectives: To evaluate the correlation between radiological items analyzed by videofluoroscopy swallow study and clinical patterns of patients SSc.
Methods: 55 patients (M/F: 6/49; median age 56y; median disease 6y, lSSc /dSSc:36/19; anti-Scl70+:21/55, ACA+:18/55, only ANA+:16/55), with a diagnosis of SSc and a history of dysphagia underwent a dynamic and morphological study of the oral, pharyngeal and esophageal phases of swallowing with videofluoroscopy. The oral and pharyngeal esophageal phases were performed in the upright position, while the esophageal phase was performed in the prone-oblique position, after administration of contrast material either in bolus form or diluted. Data were analyzed by radiologist with experience in videofluoroscopy for the evaluation of 17 videofluoroscopy items, of which, 4 concerning the oral, 4 the pharyngeal and 9 the esophageal phase, respectively. Results were expressed in a binary system. Then the main relevant videofluoroscopy findings were correlated with the principal scleroderma pattern of disease: lSSc vs dSSc; disease duration (more than 2 years) and subset of autoantibodies.
Results: Radiological study of swallowing disorders showed for oral phase: inadequate velar elevation in 4%, leakage in 15%, drooling in none (0%) and stasis of bolus in mouth in 4% of the patients. As for pharyngeal phase: stasis of bolus on pharyngeal in 49%, penetration in the laryngeal aditus in 53%, post-swallowing aspiration in 22%, abnormal upper esophageal sphincter behavior in 13% of the cases. Concerning esophageal phase: inadequate primary peristalsis in 53%, abnormal secondary peristalsis in 29%, non-peristaltic contractions in 40%, defects of clearance in 69%, abnormal lower esophageal sphincter behavior in 76%, hiatal hernia in 80%, esophageal reflux in 56%, esophagitis in 82% of the patients, nobody presented esophageal luminal stenosis. When we analyzed the swallowing disorders in different conditions we found that these are prevalent in patients with more than 2 year of disease, although may be found also early. Conversely, we have not found a significant prevalence between the lSSc or the dSSc, or a particular correlation with different patterns of autoantibodies.

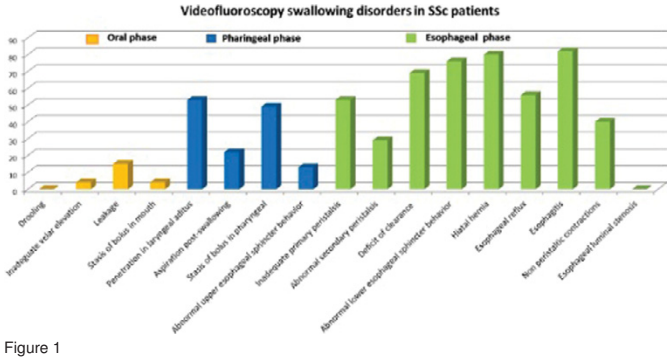

Figure 1

Conclusions: Our study demonstrated relevant abnormalities in swallowing functions in high number of patients with SSc. Pharyngeal and esophageal phases are the most affected, also early. Swallowing disorders increase with disease progression and involve similarly the limited or the diffuse SSc. An early and detailed diagnosis, supported by a semi-quantitative analysis with the use of videofluoroscopy scores, may be useful to guide the appropriate therapeutic approach, either rehabilitative or pharmacological, and finally, to improve the patient's quality of life. Extensive studies are necessary to confirm and transfer our data into clinical practice.
Disclosure of Interest: None declared
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SAT0357 FEATURES ASSOCIATED WITH MODERATE TO HIGH RISK OF MALNUTRITION IN A COHORT OF PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: It is estimated that about 28% of Systemic Sclerosis (SS) patients have moderate to high risk of malnutrition.
Objectives: to evaluate differences between SS patients with moderate to high risk of malnutrition and those with low risk.
Methods: cross-sectional, observational, multicentric study. We included patients with SS according to ACR-EULAR 2013 classification criteria. Patients were classified in groups depending on whether they were in low or moderate-high risk of malnutrition, according to the screening method for detection of adult malnutrition (MUST). Were evaluated: disease duration, disease subtype (limited or diffuse), presence of microstomia, xerostomia, active or past digital ulcers, amputations, arthritis, Rodnan Score, gastroesophageal and bowel involvement, anxiety and depression, and hands functionality by Duruöz Index. Continuous variables were described as median (IQR) or mean (SD) and percentages for categorical variables. Mann Whitney or t-test was used for continuous variables, and Fisher exact test or chi squared for categorical variables. A $p<0.05$ was considered significant. A multivariate analysis was made taking MUST as a dependent variable.
Results: 116 patients were included. Thirty percent were at moderate to high risk of malnutrition. These patients experienced significantly higher frequency of diffuse SS (49% vs 21%, p=0,003), bowel involvement (49% vs 27%. p=0,02), gastroesophageal involvement (74% vs 48%, p=0,009), higher cutaneous involvement (*median* 12 vs 6, p=<0,01), microstomia (40% vs 15%, p=0,003), worst hand functionality (*median:* 11 vs 3, p=0,02), and moderate-severe depression (37% vs 16%, p=0,012). Also, men experienced a higher moderate-high risk of malnutrition (20% vs 6%, p=0,02). In the multivariate analysis, the male sex (OR 4.55, 95% CI 1.11–20, p=0.03), the Rodnan score >9 (OR 3.13, 95% CI, 95% CI, p=0,01), and gastroesophageal involvement (OR 2.87, 95% CI 1.07–7.73, p=0.03), were independently and statistically significant.
Conclusions: These results highlight the importance of assessing the nutritional status of our SS patients.
Disclosure of Interest: None declared
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SAT0358 DECREASED BODY FAT, LEAN BODY MASS AND BONE MINERAL DENSITY IN PATIENTS WITH SYSTEMIC SCLEROSIS ARE ASSOCIATED WITH DISEASE ACTIVITY AND PHYSICAL ACTIVITY

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Background: Systemic sclerosis (SSc) is characterized by fibrosis of the skin and visceral organs, especially digestive tract, and musculoskeletal involvement, which limit mobility/self-sufficiency of patients, and can have a negative impact on body composition.
Objectives: To assess body composition and physical activity of SSc patients and healthy controls (HC).
Methods: 59 patients with SSc (50 females, 9 males; mean age 52.1; disease duration 6.7 years; limited cutaneous (lcSSc,36)/diffuse cutaneous (dcSSc,23)) and 36 age-/sex-matched HC (30 females, 6 males, mean age 51.4) without rheumatic/tumor diseases or manifest cardiovascular event were included. SSc patients fulfilled EULAR/ACR 2013 criteria. Anthropometric parameters and body composition were assessed (by densitometry-iDXA Lunar, and by bioelectric impedance-BIA-2000-M), and physical activity was evaluated using Human Activity Profile (HAP) questionnaire. Routine biochemistry analysis was performed after 8 hours of fasting. Disease activity was evaluated by EUSTAR SSc activity score. Data are presented as mean±SD.
Results: Compared to HC, patients with SSc had significantly lower body-mass index (BMI: 26.4±3.3 vs. 22.4±4.3 kg/m^2, p<0.0001) and body fat % assessed by both iDXA (BF%: 37.2±6.6 vs. 32.6±8.2%, p=0.0014) and BIA (BF%: 31.1±6.4 vs.