

interpersonal aspects, communication, financial aspects, time spent with doctor, access/availability/convenience. To estimate the quality of life we applied Short Form-8 questionnaire with 8 items for 8 domains and two components: mental and physical.

**Results:** There were 32 patients enrolled in the study, including 23 females and 9 males, mean age 52.5±14.26 (range 25–78), the disease duration was 8.3±5.3 (range 0.5–12) years. The physical component was lower 37.49±8.49, than the mental component 44.96±6.24 points, we determined that the quality of patient's life was reduced. The PSQ III results were: general satisfaction 20±2.93, technical quality 36.8±5.93, interpersonal aspects 26.50±4.92, communication 19.7±3.25 and access/availability/convenience indicated 44.75±6.29 score. The time spent with doctor was 7±1.15, a border score. The average result in the financial aspects domain was 21.6±6.6, lower than the midpoint scoring (24). We identified correlation between the quality of life and the access/availability/convenience PSQ III domain. For the mental compound the correlation was moderate ( $r=0.5$   $p<0.005$ ) and for physical domain it was weak ( $r=0.27$   $p<0.005$ ), these results can be explained by the fact that patients got accustomed with the disease, but they are more interested in access to care and require increasement of the duration of medical consultation.

**Conclusions:** Patients with idiopathic inflammatory myopathies have reduced quality of life; however they are satisfied of the medical attendance. The dissatisfaction was with the financial aspect, due to the long-term disease course and high indirect costs.

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#### AB0665 ASSOCIATION BETWEEN MICROVASCULATURE CHANGES AND PULMONARY INVOLVEMENT IN SYSTEMIC SCLEROSIS: A FOLLOW-UP STUDY

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**Background:** Lung involvement is the major cause of mortality in patients with systemic sclerosis (SSc). Gas transfer (DLCO) and FVC levels have traditionally been used as measures of disease severity and reductions of both parameters have been associated with increased mortality. In SSc repeated attacks of Raynaud's phenomenon lead to the reduced capillary density leads with reduced blood flow and tissue ischemia. Raynaud's phenomenon can occur also in the lungs. Tissue hypoxia usually initiates the formation of new blood vessels from the pre-existing microvasculature. Nailfold capillaroscopy is a safe, noninvasive routine way for the microvascular investigation.

**Objectives:** The aim of this study was to assess the correlation between capillaroscopic abnormalities and parameters of interstitial lung involvement at baseline and after one year follow-up in patients with SSc.

**Methods:** All patients underwent routine clinical examination (dyspnea, cough, crepitus), pulmonary function tests, DLCO (alveolitis grade and fibrosis), blood gases and HRCT scan of chest (1). Microvasculature changes were assessed using nailfold videocapillaroscopy (NVC) which was performed by two independent examiners. The obtained images were analysed anonymously by two investigators blinded for the clinical and serum status of SSc patients and classified as early, active and late pattern, non specific or normal picture (2). For statistical evaluation Poisson's correlation coefficient and T-test were used. All examinations were performed at baseline and after 12 months.

**Results:** Total 42 patients (38 females) were investigated: 30 individuals with limited form, 7 with diffuse form, 3 patients with scleroderma sine scleroderma, 1 with overlap syndrome and 1 with undifferentiated connective tissue disease. The mean age ± standard deviation (SD) of the whole cohort was 51±22 years and the mean disease duration ± SD was 10±7 years. 3 patients (7.5%) had early NVC pattern, 12 patients (30%) had active, 10 (58%) late pattern, and 17 (37.5%) had nonspecific changes or normal picture. The patients with late NVC pattern exhibited more often mild to moderate alveolitis, decreased FEV1 and FVC and DLCO. When correlating NVC patterns with clinical findings, pulmonary function test and HRCT scans we found only an association of low significance with dyspnea and alveolitis grade (both  $p<0.1$ ). After one year follow-up similar results were obtained ( $p<0.001$  and  $p<0.01$ , respectively).

**Conclusions:** In our study NVC patterns did not seem to correlate with severity of interstitial lung disease in SSc patients even after one year follow-up.

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#### AB0666 MYOPATHIES ASSOCIATED WITH SYSTEMIC SCLEROSIS: CLINICAL AND IMMUNOLOGICAL FEATURES FROM A TERTIARY CENTRE COHORT

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**Background:** Systemic sclerosis (SSc) is a connective tissue disease characterized by skin and internal organ fibrosis due to immune activation, vascular damage and excessive synthesis of collagen [1]. Muscle involvement is still a variable feature, with prevalence from 14% to 79% due to the lack of diagnostic consensus criteria [2].

**Objectives:** The aim of this study was to characterize the clinical, biochemical and immunological features of SSc patients with muscle involvement and to find any correlations amongst them.

**Methods:** We retrospectively analysed data for 18 SSc patients with myopathy out of 254 SSc patients followed between 2000 and 2016 in a Romanian academic hospital centre. All patients fulfilled the ACR/EULAR criteria for the diagnosis of SSc and had a history of myopathy. Myopathy was defined as the presence of muscle weakness, myalgia, with creatine kinase (CK) and/or lactate dehydrogenase (LDH) level >2N (two times the upper normal range). Clinical, biochemical and immunological parameters were assessed by descriptive statistics, logistic regression and Chi-square test.

**Results:** The prevalence of myopathy was 7.0%. General features in myopathy-SSc patients are detailed in Table 1. Male sex represents a risk factor for muscle involvement (OR=38.2,  $p$ -value<0.001). The ratio of diffuse subtype to the limited subtype was 0.8. The major organ involvement associated with myopathy was lung fibrosis (55.5%). Most prevalent autoantibody was anti-Sc170 (44.4%). The onset of muscle symptoms occurred within a median of 1.6 years (range 0–12 years) after SSc diagnosis. Among the studied patients, 12 (66.6%) had muscle weakness, and 13 (72.2%) had myalgia. CK and LDH levels were elevated in 16 (88.88%) and 18 (100%) cases, respectively. AST level values were found to be slightly higher than ALT ones but not statistically significant ( $p$ -value=0.15). A positive correlation was found between levels of LDH and AST (Pearson coefficient=0.72) and between CK and LDH (Pearson coefficient=0.66). No association was identified with inflammatory parameters.

Table 1.

SSc general data and associated features		Number out of 18 (total) and %
Female sex		12 (66.6%)
Diffuse SSc form		8 (44.4%)
Age at SSc diagnosis		43 ye ars
Digital ulcers		3 (16.6%)
Calcinosis		6 (33.3%)
Autoantibodies	Anti-nuclear	16 (88.8%)
	Anti-Sc170	8 (44.4%)
	Anti-centromere	0
	Anti-RNP	2 (11.1%)
	Anti-PM/Scl	1 (5.5%)
Heart involvement		2 (11.1%)
Lung fibrosis		10 (55.5%)
Scleroderma renal crisis		2 (11.1%)
Arthritis		4 (22.2%)
Oesophagus involvement		6 (33.3%)
Motor weakness		12 (66.6%)
Myalgia		13 (72.2%)

**Conclusions:** This study emphasizes the fact that male SSc patients are at increased risk of developing myopathy. Although the prevalence of muscle involvement was quite low than reported in other cohort series, the results are similar to the more recent publications [3]. We showed that myopathy occurred more often in anti-Sc170 positive patients and that anti-centromere wasn't present at all. All patients should be carefully assessed for muscle involvement in the first years of SSc diagnosis and screened for lung fibrosis, regardless of cutaneous subtype of the disease.

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