progress, but results are inconclusive. Moreover, little is known about the value of 18-FDG PET/TAC scan images in functional pulmonary progression of ILD associated to RA or SS.

Methods: We conducted a 12 month prospective observational study on patients diagnosed with ILD associated to SS or RA between January 2015 and May 2017. ILD diagnosis was based on clinical assessment, pulmonary function tests (PFTs) and expert HRCT evaluation. We performed three visits: basal, 6 month and 12 month. On all visits we performed a general exploration, forced vital capacity (FVC) and diffusing capacity of the lungs for carbon monoxide (DLCO) were measured. On basal and 6 month visit a 18-FDG-PET/TC was performed within a period of three months from the PFTs. Patients continued with their treatment (corticosteroids, DMARDs or immunosuppressants). The nuclear medicine physician identified the maximum and mean standardised uptake value (SUVmax and SUVmean) in the three areas with the most FDG uptake, and adenopathies uptake. PET/CT images were reviewed by 2 combined radiologist/nuclear medicine physicians in consensus.

Results: We included 17 patients, 10 had UIP associated with RA and 7 NSIP associated with SS. We included 17 patients, 10 had UIP associated with RA and 7 NSIP associated with SS. We detected significant statistical relation between the highest SUVmax and FVC (p=0.009) or DLCO progression (p=0.006) in SS patients, independently of the basal FVC and DLCO, and duration of lung illness in a multivariable linear mixed model. We didn’t find any relation between SUVmax and FVC or DLCO progression in RA patients.

Conclusions: In our cohort of patients with SS, 18 FDG PET/TAC can aid in predicting the progression of ILD associated disease, which does not occur in RA patients.

Disclosure of Interest: None declared


AB0771

ABNORMAL CAPILLAROSCOPY AND PULMONARY HYPERTENSION IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Background: Systemic sclerosis (SS) is an autoimmune disease characterised by microvascular damage with clinical manifestations such as Raynaud Phenomenon, digital ulcers, abnormal capillaroscopy and pulmonary hypertension. Systemic sclerosis is a major risk factor for the development of pulmonary arterial hypertension. Positive capillaroscopy has been associated with involvement of pulmonary vasculature.

Objectives: To determine if there is association between abnormal capillaroscopy and pulmonary hypertension in patients with systemic sclerosis.

Methods: Cross-sectional study with a study group of 48 patients with SS according to ACR/EULAR 2013 criteria; we included a control group with Rheumatoid arthritis patients (RA) and healthy subjects. The peripheral microangiopathy was studied by nailfold capillaroscopy and pulmonary involvement with transthoracic echocardiography. Descriptive statistics with mean and standard deviation were done. We did a chi-square test of homogeneity for groups comparation. Pearson’s test was done for correlation analysis. We used SPSS software for statistics.

Results: 48 patients with SS were included, 24 with RA and 24 subjects. 96% were women mean age 48 years (±13.6). More frequent co-morbilities were systemic sclerosis diagnosis and management. Nat Rev Rheumatol. 2010; 6 (10):578–87.

REFERENCES:
Conclusions: In our study, we observed the significant variation in ABI in one year, this may be due to the fact that this measurement has a high sensitivity for the detection of early peripheral arterial disease, in those patients who have not manifested signs and symptoms of arterial disease due to more evolved time of evolution.

Acknowledgements: We are uncertain regarding adverse effects of interventions as the certainty of the evidence was very low. However, participants reported marked pain and pruritus during fractional carbon dioxide laser therapy, and had mild tanning after ultraviolet A-1 phototherapy.

Conclusions: There is a lack of high-certainty evidence for the treatment of morphea, and the effectiveness and safety of the interventions are unclear. Low-certainty evidence supports the effectiveness of oral methotrexate plus oral prednisone for treating juvenile morphea. More studies are necessary to assess the effectiveness and safety of interventions for morphea.

Disclosure of Interest: None declared

measured by master instructor was 10.5 (9.0). Mean (SD) difference between skin scores by physicians and master instructor was 7.7 (9.5) units. In the univariable analysis, video education significantly reduced the difference from the gold-standard score (β = 1.96; 95% CI: −3.83 to −0.01) whereas live demonstration did not show additional enhancement in scoring skill. Effect of education program was significantly different according to the physician’s status and patient’s disease type (diffuse vs. limited). In addition, male patient, shorter disease duration and higher gold-standard skin score was associated with more accurate skin scoring irrespective of the education. In the multivariable analysis where above clinical factors were adjusted, video education also led to significantly accurate skin scoring (β = 0.92; 0.70 − 0.27). When the educational effect was stratified by individual type of examination, face and distal extremities showed greater enhancement of scoring accuracy whereas difference from gold-standard score in proximal extremities was rather increased. ICC of physicians’ skin scores was acceptable over all scoring times (0.63 to 0.88) but was not significantly changed after the education. Conclusions: The mRSS education program can significantly enhance the accuracy of mRSS, which is mainly achieved by video education.

REFERENCE:

Disclosure of Interest: None declared

AB0775 CHARACTERSISTICS OF PATIENTS WITH SCLERODERMA (SSC) TREATED WITH VARIOUS DRUGS IN THE CLINICAL ASSESSMENT AND TGF B AND IL13 CONCENTRATION IN COMPARISON TO THE HEALTHY GROUP

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Background: Scleroderma (SSc) is a rare multisystem chronic disease the treatment of which is still challenging. Until now, there is no effective therapy that can modify the overall disease course. However, the main aim of SSc treatment is directed toward managing organs involvement and providing symptomatic relief. Effective drug therapy should inhibit three components of the disease: tissue fibrosis, vascular abnormalities and autoimmunity. Moreover, potential drug needs to be considered in the context of specific subsets of the disease: fibroproliferative, inflammatory, limited, and normal-like. It was shown that various subsets could have different profile of specific cytokines: TGFβ – associated with fibroproliferative and inflammatory type of disease and IL-13 – mediator of fibrotic and vascular pathology.

Objectives: The aim of the study was to assess the level of TGFβ and IL-13 in SSc pts with various treatment regimen comparing to healthy control.

Methods: 55 patients (71% were women) with SSc diagnosed according to EULAR/ACR 2013 criteria were divided into 5 treatment groups: 1st group – 6 pts treated with methotrexate (MTX), 2–13 pts with mycophenolate mofetil (MMF), 3–5 pts with cyclophosphamide (CYC), 4th group – 7 pts with azathioprine (AZA), 5th group- 22 pts without immunosuppressive treatment. All patients have been treated based on a scheme required for organs involvement in accordance with the update of EULAR recommendations from 2016. Mean age of patients was 54.56 ±13.97. The blood and serum samples have been collected for basic examination. TGFβ and IL-13 concentration in serum was also quantitated by ELISA. Differences in cytokine concentration were determined using non-parametric Kruskal-Wallis test. The level of statistical significance was set at p<0.05. The modified Rodnan Skin Score (mRSS) examination was taken by one assessor at the beginning of the study and six months later. There were measured DLCO, HRCT, echocardiography and capillaroscopy.

Results: In 82% pts positive antinuclear antibodies have been revealed: in 16% positive results for CENPB were obtained and in 44% for ScI70. Capillaroscopy shown in 23% of pts early pattern, in 38% – active pattern, and in 27% – late pattern. 32% of SSc pts had confirmed pulmonary fibrosis, while 90% – Raynaud’s syndrome. The median of mRSS in CENPB (+) pts was 5.4 ± 2.49 in ScI70 (+) pts – 12.28. Statistically significant differences were found between IL13 and TGFβ levels in patients treated with immunosuppressants and healthy subjects. There was no correlation between IL13 or TGFβ with lung fibrosis progression or skin involvement.

Conclusions: In conclusion, our findings indicate that IL 13 and TGFβ are characteristic cytokines in scleroderma, but these parameters did not correlate with severely progressive course of SSc.

Disclosure of Interest: None declared

Abstract AB0776 – Table 1. Comparison of serum level of IL 13 and TGFβ in SSc pts

<table>
<thead>
<tr>
<th>Group</th>
<th>Patients</th>
<th>TGFβ (pg/mL)</th>
<th>IL13 (pg/mL)</th>
<th>Wald Test p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy</td>
<td>5</td>
<td>1.2 ± 0.4</td>
<td>0.7 ± 0.3</td>
<td>0.31</td>
</tr>
<tr>
<td>MTX</td>
<td>6</td>
<td>3.8 ± 1.2</td>
<td>1.5 ± 0.7</td>
<td>0.06</td>
</tr>
<tr>
<td>MMF</td>
<td>13</td>
<td>4.2 ± 1.5</td>
<td>1.8 ± 0.8</td>
<td>0.03</td>
</tr>
<tr>
<td>CYC</td>
<td>4</td>
<td>5.1 ± 2.1</td>
<td>2.2 ± 1.1</td>
<td>0.12</td>
</tr>
<tr>
<td>AZA</td>
<td>7</td>
<td>5.7 ± 2.3</td>
<td>2.5 ± 1.2</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Conclusions: In conclusion, our findings indicate that IL 13 and TGFβ are characteristic cytokines in scleroderma, but these parameters did not correlate with severely progressive course of SSc.

Disclosure of Interest: None declared

AB0776 MUSCLE ULTRASONOGRAPHY: A POTENTIAL NEW DIAGNOSTIC TOOL FOR INFLAMMATORY MYOPATHIES

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Background: Quantitative muscle ultrasound (QMUS) imaging has proven to be a useful, non-invasive technique to visualise normal and pathological skeletal muscle tissue. Electromyography (EMG) findings are not always disease specific in patients suspected of dopaephic inflammatory myopathies (IIM).

Objectives: To assess diagnostic value of QMUS in patients suspected for an IIM and to compare results with EMG.

Methods: In 57 patients, suspected for IIM, panel diagnosis blinded for QMUS was used as reference standard. QMUS results were used to classify patients according to an ultrasound neuromuscular disorder (NMD) algorithm (normal/borderline/abnormal). The predictive value of QMUS and EMG was assessed in a two by two table and a multivariate logistic regression model.

Results: Twenty-two patients (39%) were diagnosed with IIM; 8 polymyositis, 4 dermatomyositis, 4 necrotizing myopathy, 3 inclusion body myositis and 3 non-specific myositis. Sixteen patients were classified with other NMD. We found an increased echointensity of the sternocleidomastoid, biceps, forearm flexor and tibialis anterior in the IIM group. Sensitivity, specificity, positive and negative predictive values (PPV/NPV) were 82%, 51%, 51%, 82% for ultrasound NMD algorithm and 63%, 64%, 50%, 75% for EMG. Multivariate analyses showed area under the curve (AUC) (0.81) (0.69–0.92) for ultrasound NMD algorithm, EMG (0.79) (0.67–0.92) and ultrasound NMD algorithm plus EMG (0.82) (0.70–0.93).

Predictor:

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serum CK &gt; 2 x upper limit</td>
<td>2.97 (0.65–13.59)</td>
<td>2.88 (0.62–13.28)</td>
<td>2.96 (0.62–14.21)</td>
</tr>
<tr>
<td>Muscle ultrasound</td>
<td>7.52 (1.57–49.55)</td>
<td>8.76 (1.55–44.21)</td>
<td>7.35 (1.22–44.21)</td>
</tr>
<tr>
<td>Total echotexture of proximal muscles/ measured muscle</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distal muscles affected (yes/no)</td>
<td>Reference: 1.61 (1.13–18.67)</td>
<td>1.62 (1.03–19.57)</td>
<td>1.62 (1.03–19.57)</td>
</tr>
<tr>
<td>Presence of NMD (yes/no)</td>
<td>3.01 (0.44–20.55)</td>
<td>3.01 (0.44–20.55)</td>
<td>3.01 (0.44–20.55)</td>
</tr>
<tr>
<td>EMG qualitative report</td>
<td>Reference: 1.00 (0.08–11.67)</td>
<td>0.94 (0.07–12.09)</td>
<td>0.94 (0.07–12.09)</td>
</tr>
<tr>
<td>Positive myopathic results</td>
<td>1.28 (0.23–7.13)</td>
<td>1.03 (0.17–6.04)</td>
<td>1.03 (0.17–6.04)</td>
</tr>
<tr>
<td>Cox and Snell R Square</td>
<td>0.28</td>
<td>0.26</td>
<td>0.28</td>
</tr>
<tr>
<td>Nagelkerke R Square</td>
<td>0.38</td>
<td>0.35</td>
<td>0.38</td>
</tr>
<tr>
<td>Hosmer Lemeshow Test</td>
<td>0.91</td>
<td>0.94</td>
<td>0.69</td>
</tr>
<tr>
<td>AUC (95% CI)</td>
<td>0.81 (0.69–0.92)</td>
<td>0.79 (0.67–0.82)</td>
<td>0.70 (0.67–0.82)</td>
</tr>
</tbody>
</table>

Scientific Abstracts

[18.87]

None declared