progress, but results are inconclusive. Moreover, little is known about the value of 18-FDG PET uptake in ILD associated to RA or SS.

Objectives: The purpose of this study is to evaluate the predictive value of 18 FDG-PET/CT 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 a general exploration, forced vital capacity (FVC) and diffusing capacity of the lungs for carbon monoxide (DLCO) were carried out. 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 related to SS. It appeared that RA patients had longer lung illness evolution and worse FVC than SS patients (table 1), in spite of not having found statistical differences. 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

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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 by transthoracic echocardiography. Descriptive statistics with mean and standard deviation were done. We did a chi-square test of homogeneity for groups comparison. 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 (± 13.6). More frequent co-morbidities were systemic hypertension 17% in Ss vs 25% in RA. The most frequent clinical finding was Raynaud phenomenon in 81% and dysphagia in 67%. 64% of the patients with Ss were positive to anti-centromere antibody. Abnormal capillaroscopy was found in 77% of the Ss patients with the following patterns: early 42%, active 33% and late 23%, also we found abnormal capillaroscopy in 8% of the AR and healthy controls. We found 6% of pulmonary hypertension in Ss 4% was mild and 2% severe. Positive Correlations were Abnormal capillaroscopy and Lung interstitial disease $r=0.36$ ($p=0.009$), active pattern $r=0.385$ ($p=0.006$), dilated capillaries $r=0.457$

($p=0.001$). The Modified Rodnan score was correlated with: active pattern $r=0.525$ ($p=0.000$), dilated capillaries $r=0.444$ ($p=0.001$) and avascular areas $r=0.495$ ($p=0.000$). We did not find association between abnormal capillaroscopy and pulmonary hypertension $r=0.106$ ($p=0.300$)

Conclusions: We found positive association between abnormal capillaroscopy and interstitial lung disease and no correlation with pulmonary hypertension

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AB0772

PROSPECTIVE STUDY OF CARDIOVASCULAR RISK ASSESSMENT IN SYSTEMIC SCLEROSIS

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Objectives: Evaluate evolution of cardiovascular risk (CVR) in a cohort of systemic sclerosis (SSc) in one year of follow-up.

Methods: Prospective longitudinal study of a cohort of 45 patients with SSc during a period of one year. Sociodemographic and analytical variables were analysed at the time of inclusion in the study (baseline) and after 12 months of follow-up. The vascular protocol with carotid ultrasound was performed, including the determination of carotid intima-media thickness (IMT) and the evaluation of atheromatous plaques; in addition to the performance of the ankle-brachial index (ABI) and the determination of endothelial dysfunction (ED) through the measurement of flow-mediated vasodilation (FMVD), all at baseline and at one year.

Results: 45 patients were included, 94% of them female, with a mean age of 52.2 ± 11.5 years and mean evolution time of 4.6 ± 5.1 years. The distribution by subgroups was 44.4% limited SSc, 35.5% diffuse SSc, 4.4% pre-scleroderma, 4.4% sine scleroderma SSc, 6.6% MTCD, and 4.4% overlap syndrome. Classical CVR variables were collected as smoking habit, DM, HTN, obesity, DLP, hyperhomocysteinemia, and clinical variables of the SSc were added such as modified Rodnan Skin Score (mRSS), pulmonary arterial hypertension (PAH), interstitial lung disease (ILD), capillaroscopic pattern, SSc specific antibodies and previous treatments.

A bivariate analysis was performed using binomial logistic regression, both at baseline and at one year. Pathological IMT (>0.9 mm) was significantly associated with hyperhomocysteinemia ($p=0.024$, OR=3.03, CI 1.33–9.58). The presence of atheromatous plaque was associated with corticosteroid treatment ($p=0.048$, OR=0.58, CI 0.28–0.97). Pathological ITB (<0.9) was significantly associated with the 25-OH-vitamin D deficit ($p=0.031$, OR=0.25, CI 0.06–0.77). ED did not show a statistically significant association with the parameters studied.

To evaluate the effect of time, a binomial model was adjusted by linear regression of mixed effects for the variables of CV affection considered (see table 1). Time proved to be a risk factor to present pathological ITB values, since it was evidenced at baseline in 4.4% of the sample compared to 20% in the one-year study. Consequently, a multivariate analysis was performed showing pathological ABI was significantly associated to time ($p<0.001$, OR=59.7, CI 59.64–59.75) and mRSS, although with little effect ($p<0.001$, OR=0.042, IC 0.036–0.047). Time was not a risk factor for the appearance of pathological IMT, ED or plaques.