Methods: We analyzed thoracic-CT scanners of 35 SSC patients (88% female, aged 478 ± 12.9, disease duration 12.8 ± 9.9) to determine the location and extension of vascular and cardiac calcification. All recruited patients fulfilled the 2013 ACR/EULAR classification criteria for SSC. No patients had renal failure, cardiomyopathy, myocarditis, history of cardiac surgery or radiotherapy.

Results: We found myocardial vessels calcifications (MCVs) in 37% SSC patients, aortic wall calcifications (ACw) in 60% SSC patients, cardiac valve calcifications (VC) in 28% SSC patient and heart wall calcifications (HCw) in 20%.

The SSC patients with one almost had all calcification (65.9±8.8 vs 50.3±8.8; p<0.001) and higher values of circulating NTproBNP (336.9±351.9 vs 144.2±127.8; p=0.04) compared to those without.

In particular, the SSC patients with MCV had and uric acid (5.3 ± 1.4 vs 4.1 ± 1.3; p=0.05), higher rate of PAH (25% vs 0%; p=0.037), arrhythmia (38.5% vs 9%; p=0.036) and higher prevalence of CENP-B antibodies (48% vs 4%; p=0.01) compared to patients without MCV.

Patients with HCw had lower C reactive protein (0.16 ± 0.10 vs 0.7 ± 0.07; p=0.008) compared to those without HCw. No differences in the rate of heart and vascular complications of SSC were observed.

The SSC patients with ACw had higher frequency of arrhythmia (33% vs 0%; p=0.016) and longer disease duration (15.5 ± 9.9 vs 8.8 ± 5.8; p=0.03).

The SSC patients with VC had higher rate of PAH (33%vs0%; p=0.003) and uric acid (6.0±5.8vs3.8±1.2;p=0.001).

Regression analysis excluded any association with gender, BMI, systemic arterial hypertension, steroid therapy, hypovitaminosis D or smoking habit. No cardiovascular event was recorded in one year of observation.

Conclusion: All patterns of calcifications may be related mostly with the older age. Myocardial vessels calcifications have been found in a high percentage of SSC patients and in particular those with PAH and positive for anti CENP-B.

Furthermore, myocardial vessels calcifications could be associated to the higher occurrence of arrhythmia. More studies are needed to assess the importance of vascular calcification as a part of the vascular involvement in SSC.

References:

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**ABO609**

**THE SPECTRUM OF ANTINUCLEAR ANTIBODIES IN PATIENTS WITH SYSTEMIC SCLEROSIS POSITIVE FOR ANTI-U1RNP**

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**Background:** Patients with systemic sclerosis positive for anti-U1RNP have special clinical picture and disease progression. The autoimmune profile in this group is poorly understood.

**Objectives:** The purpose of our work was to study the level of major autoantibodies in patients with systemic sclerosis positive for anti-U1RNP.

**Methods:** The study included 80 patients (71 women and 9 men, mean age 44.5±14 years) positive for antibodies to RNP and meeting the criteria of the systemic sclerosis (ACR/EULAR 2013). Patients were examined for autoantibodies: RF, ACCP, ACA, anti-ScI70, anti-RNAP-III, anti-Ro, anti-La, anti-dsDNA, anti-Sm, ACL, anti-Jo-1. Patients were examined in dynamics in 24 months.

**Results:** In the study group the clinical picture was dominated by inflammatory musculoskeletal lesions (sarcopathy and myopathy), skin manifestations were poorly expressed. Intestinal vessel disease was detected in 68% of cases. Overlaps (34%) with other rheumatic diseases (rheumatoid arthritis, systemic lupus erythematosus) and combination with Sjogren’s syndrome (32.5%) were frequently noted. Other antibodies were often detected: commonly - RF (31%), anti-Ro (38%), anti-dsDNA (42%), rarely - anti-Sm (11%), ACCP (8%), anti-La (8%), ACA (6%), anti-ScI70 (6%), AKL (2%). Anti-Jo-1 and anti-RNAP-III were not detected at all. In patients with systemic sclerosis high-positive for anti-U1RNP (more than 2 upper normal limits) RF, anti-Ro, anti-dsDNA were significantly more common in comparison with low-positive (p=0.00). In dynamics 80% of patients maintained anti-U1RNP, while other autoantibodies were detected with the same frequency. In patients with initially low titer of anti-U1RNP, their disappearance was noted.