Background: Antisyntetase syndrome (ASS) is characterized by inflammatory myopathy, interstitial lung disease, arthritis, mechanical hands and Raynaud phenomenon, among other features. Recent studies have shown that idiopathic inflammatory myopathies (IIM) may develop cardiac involvement, either ischemic (coronary artery disease) or inflammatory (myocarditis). We wonder if characteristic lung interstitial involvement (interstitial lung disease) that appears in patients with the ASS may also affect the myocardial interstitial tissue. New magnetic resonance mapping techniques could detect subclinical myocardial involvement, mainly as edema (increase extracellular volume in interstitium and extracellular matrix), even in the absence of visible late Gadolinium enhancement (LGE).

Objectives: Our aim was to describe the presence of interstitial myocarditis in a group of patients with ASS.

Methods: Cross-sectional, observational study performed in a tertiary care center. We included 13 patients diagnosed with ASS (7 male, 53%, mean (SD) age at diagnosis 56.8 years ±11.8). The patients were consecutively selected from our outpatient myositis clinic. Myositis specific and associated antibodies were performed by means of line immunoblot (EUROIMMUN©). Cardiac magnetic resonance (CMR) was performed on all patients. The study protocol includes functional cine magnetic resonance and standard late gadolinium enhancement (LGE), as well as novel parametric T1 and T2 mapping sequences (modified look locker inversion recovery sequences - MOLLI) with extracellular volume (ECV) calculation 20 minutes after the injection of a gadolinium-based contrast material.

Results: CMR could not be performed in one patient due to anxiety. All patients studied (12) had a normal biventricular function, without alteration of segmental contraction. A third (4 out of 12, 33%) of the studied patients showed elevated T2 myocardial values without focal LGE, half of them (2/4) with an elevated ECV, consistent with myocardial edema. Two patients with normal T2 values showed unspecific LGE focal patterns, one in the right ventricle union points and another with mild interventricular septum enhancement (Figure 1). None of the patients studied refer any cardiac symptomatology. All the four patients with T2 mapping alterations (100%) had interstitial lung involvement, but only 4 out of 8 (50%) of the rest ASS patients without T2 mapping positivity. The autoimmune profile was as follows: 10 anti-Jo1/Ro52, 1 anti-EJ/Ro52, 2 anti-PL12.

Conclusion: Myocarditis, although subclinical, appears to be a feature in ASS patients. T1 and T2 mapping sequences might be valuable to detect and monitor subclinical cardiac involvement in these patients. The possibility that the same etiopathogenic mechanism may be involved in the interstitial tissue in lung and myocardium is raised. More studies must be done in order to assert the prevalence of myocarditis in ASS.

REFERENCES:

Disclosure of Interests: None declared DOI: 10.1136/annrheumdis-2021-eular.3896
Three different phenotypes linked with the anti-MDA5 antibodies. However, not all the patients with dermatomyositis and anti-MDA5 positive antibodies develop this severe condition.

Methods: We retrospectively analyzed the clinical and immunological data of 90 anti-MDA5 patients (50 female, 55.6%, mean (SD) age at diagnosis 47 (15.4) yrs.) with dermatomyositis recruited from a multicenter register in Spain (MEDRA5) including 30 hospitals. All the patients fulfill the International Myositis Classification Criteria (EULAR/ACR) for dermatomyositis (score >90%). Anti-MDA5 were detected by means of commercial immunoblot (EUROMMUN). The chi-square test was used to assess the relationships between qualitative variables. The Kruskal-Wallis test was used to compared medians between groups.

Results: Sixty-six patients (73.3%) were diagnosed clinically with amyopathic dermatomyositis. Three different phenotypes linked with the anti-MDA5 antibody were identified. Patients: patients with rapidly-ILD phenotype (28 patients, 31.1%), group 2: antisynthetase-like phenotype (23 patients, 25.5%), and group 3 (41-51): (p=0.01); disease onset was more frequent in spring in patients from group 1 [53 (43-60)] vs. group 2 [46 (40-56)] (p<0.01). Cancer was detected in 7 patients, only associated with myositis in 3 cases (3 years interval between cancer and dermatomyositis) without significantly increases knee extensor force in patients with hemiparetic stroke. Necrorehabil Neural Repair. 2011;25:565-9.

Acknowledgements: This work was supported by the Consejo Nacional de Desarrollo Científico e Tecnológico (CNPq) 303.379/2018-9, Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP) 2019/11776-6, Facul- dade de Medicina da USP/SP to SKS.

Disclosure of Interests: None declared

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Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.3837

REFERENCES:

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