Background: Familial Mediterranean fever (FMF) is an autoinflammatory disease that is caused by Mediterranean fever (MEFV) gene mutations. It is characterized by recurrent and self-limiting febrile attacks within a short period. Although the pathologic significance of MEFV exon 2 or exon 3 variants is modest and these variants are usually associated with less severe clinical presentations of FMF (1, 2), their combined effects with pathogenic mutation in exon 10 remain to be evaluated.

Objectives: To determine the combined effect of common variants on clinical manifestations and inflammasome activation, we compared the clinical and laboratory characteristics between IgG4-RD experts (Group 1); Retroperitoneum/Aortitis (Group 2); Head-and-neck limited (Group 3); and IgG4-RD Responder Index (RI); history of atopy, diabetes, osteoporosis, relapses, and tumors; cumulative dose of glucocorticoids and use of rituximab.

Methods: We studied included 179 patients. Four IgG4-RD experts were asked to classify a validation cohort of 40 patients according to published LCA derived cluster analysis. Agreement between LCA and clinical judgment was calculated. To assess differences among disease phenotypes, the following variables were recorded on different 139 patients: serum IgG4 and IgE; inflammatory markers; eosinophils; plasmablasts; IgG4-RD Responder Index (RI); history of atopy, diabetes, osteoporosis, relapses, and tumors; cumulative dose of glucocorticoids and use of rituximab.

Results: Clinical judgment recapitulated LCA classification to evaluate potential differences in epidemiological features, serological findings, and disease outcomes between disease phenotypes.

Conclusion: Our results suggest that the coexistence of MEFV exon 2 or exon 3 variants and a MEFV exon 10 mutation has combined effects on inflammasome activation in the Japanese population.
SAT0529

CLINICAL CHARACTERISTICS AND TREATMENT PATTERNS IN A PATIENT GROUP WITH INTERSTITIAL LUNG DISEASE.

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Background: Diffuse interstitial lung disease (ILD) is frequently associated with connective tissue diseases (CTD) and is one of the main causes of morbidity and mortality in these patients. Recently, the concept of Interstitial Pneumonia with Autoimmune Features (IPAF) has been defined to characterize ILD associated with systemic manifestations limited to subtle serological and clinical autoimmune abnormalities and not fulfilling the international criteria for the diagnosis of a given CTD. 

Objectives: The objective of this study is to describe the clinical, serological and radiological characteristics, as well as the treatment patterns of patients with ILD referred to a Rheumatology Service for suspected CTD.

Methods: Observational, cross-sectional study of 43 patients with ILD referred for evaluation to the medical consultation of CTD of the Rheumatology service at the Reina Sofia Hospital. Patients were classified as patients with defined CTD, patient with IPAF and patients with other types of pneumopathy. We conducted a descriptive study of all patients and compared the clinical-analytical-radiological characteristics and treatment patterns of the first two groups.

Results: Of the 43 patients, 67.40% were women with a mean age at diagnosis of 65.65 (10.42) years and 53.50% of smoking patients. Of the total patients, 16 (37.2%) were included in the CTD group, 17 (39.5%) met criteria for IPAF and 10 (23.3%) had another type of pneumopathy. In the CTD group, patients with scleroderma was the most frequent disease (8/16), followed by inflammatory myopathy (4/16), Sjögren's syndrome (3/16), rheumatoid arthritis (2/16) and polymyalgia rheumatic (1/16). In this group of patients, the most common symptom was Raynaud's phenomenon (7/16), followed by arthritis (7/16) and mechanic's hands (3/16). Regarding the most frequent antibodies were ANA (100%), anti-Ro (41.7%), anti-SS-A antibodies (30%) and rheumatoid factor (56.2%).

In patients with IPAF as in the CTD group, the most observed clinical criterion was RP (5/16), followed by arthritis (1/16) and mechanic's hands (1/16). Among the serological criteria the most common antibodies were ANA (100%), followed by anti-RO (33.3%), anti-RNA synthetase (28.6%) and RF (22.2%).

Regarding the radiological pattern, in both groups the most frequent was nonspecific interstitial pneumonia, followed by the indeterminate pattern and usual interstitial pneumonia (UIP) in third place. There were no significant differences by gender and age, between the group of CTD and IPAF, observing in both groups a predominance of women with a similar mean age, being the upper smoking habit in the IPAF group (70.6% vs 31.5%, p = 0.02). Regarding the treatment used, the use of immunosuppressants (IS) was more frequent in CTD group (56.3% vs 11.8%, p = 0.007).

Conclusion: The clinical-serological and radiological characteristics were similar among patients with IPAF and CTD, which supports the notion of a similar pathophysiology in both groups. In our cohort patients with CTD received IS more frequently than IPAF group, however, future work would be necessary to assess whether the response to treatment is similar in these populations and if IS can benefit patients with IPAF to long term. In addition, it could be useful to include the UIP pattern within the IPAF classification criteria, not currently included, since it is the third most frequent radiological pattern.

References:

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SAT0530

DESCRIPTION AND OUTCOMES OF A SERIES OF 21 PATIENTS WITH INTERSTITIAL PNEUMONIA WITH AUTOIMMUNE FEATURES IN A MULTIDISCIPLINARY UNIT.

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Background: A significant proportion of patients with idiopathic interstitial pneumonia shows autoimmune features, but do not meet the criteria to be classified as a systemic autoimmune disease. In 2015, a joint working group of the European Respiratory Society (ERS) and the American Thoracic Society (ATS) proposed classification criteria for the category called interstitial pneumonia with autoimmune features (IPAF).

Objectives: To evaluate the clinical, serological and morphological characteristics of a series of 21 patients with IPAF as well as the treatment that was applied and the evolution they presented.

Methods: A retrospective cohort study was conducted. The patients who met ERS/ATC IPAF classification criteria in the period from 2012 to 2019 were collected from our interstitial lung disease (ILD) database, including 546 patients. All cases were systematically assessed in a multidisciplinary committee. Clinical, serological, morphological, as well as treatment and outcome variables were collected. A Descriptive analysis is shown.

Results: 21 patients were included in the study, 12 of them (57.1%) women. The mean age at diagnosis was 61.6 years (SD 14.0), and the median follow-up time was 2.9 years (IQR 4.9). All showed ILD by HRCT, 10 (47.6%) patients had autoimmune features at the moment of the diagnosis, and 20 (95.2%) fulfilled the three IPAF criteria. Characteristics are described in Table 1. Lung biopsy was performed in 9 cases (42.9%). The mean FVC at diagnosis was 70.4% (DS 21.0) and DLCCO 46.7% (DS 21.5). Regarding the treatment during the disease, metolof mycophenolate (MMF) was used in 8 (38.1%) patients, cyclophosphamide (CYC) in 3 (14.3%), rituximab (RTX) in 2 (9.5%) and azathioprine in 2 (9.5%). In 1 case (4.8%), CYC and RTX were used in combination. Oral glucocorticoids (GCC) were prescribed in 14 patients (66.7%), cyclophosphamide (CYC) in 3 (14.3%), rituximab (RTX) in 2 (9.5%) and azathioprine in 2 (9.5%). Oral glucocorticoids were used in 9 cases (42.9%) and methylprednisolone in 3 (14.3%).

In this group of patients, the most frequent clinical criterion was arthritis (66.7%), followed by mechanic's hands (38.1%) and Raynaud's phenomenon (19.0%). In 6 cases (28.6%) patients had readmissions due to ILD acute exacerbation; 2 (9.5%) required high-dose methylprednisolone in combination. Oral glucocorticoids (GCC) were prescribed in 14 patients (66.7%), cyclophosphamide (CYC) in 3 (14.3%), rituximab (RTX) in 2 (9.5%) and azathioprine in 2 (9.5%). Oral glucocorticoids were used in 9 cases (42.9%) and methylprednisolone in 3 (14.3%).

In conclusion, the clinical-serological and radiological characteristics were similar among patients with IPAF and CTD, which supports the notion of a similar pathophysiology in both groups. In our cohort patients with CTD received IS more frequently than IPAF group, however, future work would be necessary to assess whether the response to treatment is similar in these populations and if IS can benefit patients with IPAF to long term. In addition, it could be useful to include the UIP pattern within the IPAF classification criteria, not currently included, since it is the third most frequent radiological pattern.