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SAT0210

THE ANTI-RO52 PREVALENCE IN THE SJÖGREN'S SYNDROME PICTURE: A SINGLE CENTER CROSS SECTIONAL STUDY

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Background: Sjögren syndrome (SjS) is an autoimmune disorder characterized by inflammation and destruction of exocrine glands. The presence of autoantibodies (AA) against the Ro52/TRIM21, an RNP complex binding to the stem-loop structure of human cytoplasmic RNA, might be relevant in the SjS pathogenesis. It has been suggested that distinguishing between antibody reactivity against Ro60 and Ro52/TRIM21 could be helpful in terms of evaluating clinical course, features and even pre-symptomatic stages of the disease (1).

Objectives: To evaluate the prevalence of anti-Ro52/TRIM21 antibodies in a cohort of patients diagnosed with primary SjS.

Methods: In this cross-sectional study we evaluated 179 patients with primary SjS according to the ACR classification criteria who had been admitted between December 2008 and December 2018 to our outpatient clinic. All patients had ANA titers higher than 1:320 (2) in at least two positive determinations for any pattern. ANA, anti-Ro52/TRIM21, anti-Ro60, anti-La and rheumatoid factor (RF) were tested by immunoblot (Euroimmun, Lübeck, Germany).

Results: In our cohort the median age at diagnosis was 57 years (range: 20- 85 years) with a clear dominance of females (n=160, 89%). the most frequently reported ANA patterns were speckled (93%), while only few patients had a homogeneous (6%) pattern. 177/179 were positive for anti-Ro52/TRIM21 (98%), 159/179 (88%) for anti-Ro60, 127/179 for anti-La (79%) and 94/179 (52%) showed RF reactivity. 76/179 (42%) patients showed all four reactivities (anti-Ro52/TRIM21, anti-Ro60, anti-La and RF). Out of these 76 patients, 11 (6%) patients exhibited Raynaud's syndrome, 25 (13%) exhibited arthritis/arthralgia, 31 (17%) had hypergammaglobulinemia, 13 (7%) had hypocomplementemia and 26% had elevated free kappa/lambda chains, as typical clinical and laboratory features described in SjS.

Conclusion: Our results showed that anti-Ro52/TRIM21 but not anti-Ro60 is present in virtually all patients with SjS and had the most prevalent antibody reactivity. This finding needs to be considered in the current classification criteria of SjS (2), which include the presence of anti-Ro60, rather than anti-Ro52/TRIM21. Also, including the anti-Ro52/TRIM21 measurement in larger cohorts and longitudinal studies would also help us in improving the knowledge of its pathogenic role and to define of more focused diagnostic/therapeutic strategies.

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SAT0211

LYMPHOPENIA WITH SYSTEMIC LUPUS ERYTHEMATOSUS: LYMPHOCYTE SUBSETS OF PATHOPHYSIOLOGICAL FEATURES

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Background: Systemic lupus erythematosus (SLE) is an autoimmune disease involving multiple systems. It is mainly characterized by abnormal activation of T and B lymphocytes and the production of a large number of autoantibodies. Blood system involvement is a common clinical manifestation. The occurrence of lymphopenia is very common, easy to merge infection and primary immunodeficiency^[1-3].

Objectives: To study the distribution characteristics of peripheral blood lymphocyte cell subsets in patients with newly diagnosed SLE and to explore the possible mechanism of lymphocyte reduction.

Methods: Sixty-six female patients with initial SLE. The diagnosis was consistent with the 1997 revised American College of Rheumatology (ACR) SLE classification criteria, and no glucocorticoids and immunosuppressive agents were used. According to the absolute value lymphocytes with SLE, 40 patients were divided into lymphopenia group(LA)(LY< 1.0×10⁹/L), and 26 patients were normal lymphocytes group(LN). 30 female healthy controls. The absolute numbers of lymphocyte cell subsets and T subsets (total T, CD4⁺T, CD8⁺T, T helper 1 (Th1), T helper 2 (Th2), T helper 17 (Th17) and CD4⁺CD25⁺Foxp3⁺T regulatory (Treg) cells) in peripheral blood were measured by Flow Cytometer (FCM).

Results: In the lymphopenia group, the absolute counts of T cell subsets and NK cells were significantly reduced, but the percentage of B cells and Th1 cells and the ratio of Th1/Th2 cells were significantly increased (Figure 1). The absolute number of CD4⁺ T cells and CD8⁺ T cells was significantly positively correlated with C3 levels(Figure 2).

Conclusion: Decreased T cell subsets and NK cells may be key pathophysiological features, as risk factor for development of severe infections and primary immunodeficiency in patients lymphopenia with SLE. Meanwhile, decreased CD4⁺ T cells and CD8⁺ T cells and increased B cells may cause auto- antibodies production leading to lymphopenia with SLE. Further studies are needed to assess profound lymphopenia and require specific management.

Figure 1. Absolute number and percentage of peripheral T cells, T-cells subsets, B cells and NK cells of patients with HC, LN and LA. One-Way ANOVA analysis was used to compare HC and LN and LA with SLE(*p<0.5, **p<0.01, ***p<0.001). HC, healthy control; LN, lymphocyte normal; LA, lymphopenia.

Figure 2: Correlation of the absolute number of peripheral CD4+T cells and of CD8+T cells with the serum levels of complement C3.

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SAT0212

ASSOCIATION BETWEEN SELF-EFFICACY AND HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Self-efficacy for managing chronic conditions assesses the confidence a person has on the ability of successfully perform specific tasks related to a chronic condition in several different situations. Self-efficacy is considered one of the most important modifiable factors in educational interventions that enhance Systemic Lupus Erythematosus (SLE) patients' mental health status. Low disease self-efficacy is associated with SLE morbidity.¹

Objectives: To determine the association of several domains of self-efficacy for managing chronic conditions and health-related quality of life (HRQoL) in SLE patients.

Methods: We evaluated patients with SLE from a single center cohort between October 2018 and January 2019. Using a standard protocol, we evaluated demographic characteristics, clinical manifestations and treatment. Self-efficacy was measured with the Spanish version of the Self-Efficacy for Managing Chronic Disease Scale (PROMIS Short Form v1.0) which include six domains: general self-efficacy, managing emotions, managing symptoms, managing daily activities, managing social interactions, managing medications and treatment. A score of 50 is the average for the US general populations with a standard deviation of 10 (such values are not available for Peruvian or Latin American populations). HRQoL was measured with the LupusQoL, disease activity was ascertained with

Table 1. Association between several domains of self-efficacy for managing of Systemic Lupus Erythematosus and the health-related quality of life. Multivariable analyses.

Self-Efficacy Domains	Physical health	Pain	Planning	HR-QoL Domains	Emotional health	Body image	Fatigue
General self-efficacy 4a	B (56) 1.15 (0.26)	1.33 (0.32)	1.08 (0.33)	0.75 (0.38)	1.18 (0.33)	1.26 (0.32)	1.50 (0.29)
p	<0.001	<0.001	0.001	0.009	<0.001	<0.001	<0.001
Self-Efficacy for Managing emotions 8a	B (56) 1.80 (0.29)	2.06 (0.36)	2.04 (0.36)	1.41 (0.43)	1.93 (0.35)	1.75 (0.40)	2.05 (0.35)
p	<0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Self-Efficacy for Managing symptoms 8a	B (56) 1.27 (0.32)	1.54 (0.38)	1.21 (0.40)	1.04 (0.44)	1.47 (0.37)	1.64 (0.37)	1.44 (0.37)
p	<0.001	<0.001	0.002	0.003	<0.001	<0.001	<0.001
Self-Efficacy for Managing daily activities 8a	B (56) 2.20 (0.26)	2.43 (0.34)	2.08 (0.37)	1.41 (0.45)	1.89 (0.37)	1.92 (0.40)	2.47 (0.31)
p	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	<0.001
Self-Efficacy for Managing social interactions 8a	B (56) 1.18 (0.36)	1.44 (0.43)	1.42 (0.43)	0.95 (0.49)	1.82 (0.39)	2.04 (0.41)	1.33 (0.42)
p	0.001	0.001	0.001	0.052	<0.001	<0.001	0.002
Self-Efficacy for Managing medications and Treatments 8a	B (56) 0.47 (0.34)	0.65 (0.42)	0.39 (0.43)	0.24 (0.43)	0.90 (0.40)	1.21 (0.41)	0.97 (0.40)
p	0.189	0.123	0.355	0.578	0.024	0.003	0.015

SE standard error

the Systemic Lupus Erythematosus Disease Activity Index – 2K (SLEDAI-2K), and damage with the Systemic Lupus International Collaborating Clinics (SLICC)/American College of Rheumatology (ACR) damage index (SDI). The associations between self-efficacy (six domains) and each domain of LupusQoL were examined using linear regression models, adjusted by gender, age at diagnosis, socioeconomic status, educational level, SLEDAI-2K, SDI, prednisone daily dose, and antimalarial and immunosuppressant use.

Results: A total of 60 patients fit the inclusion criteria. Of them, 54 (90.0%) were female, their mean (SD) age at diagnosis was 37.3 (13.4) years, disease duration was 9.2 (7.2) years. The HRQoL domains most affected were the following: burden to others, intimate relationships, and body image. Self-efficacy was lower than the expected for the general population ranging between 43.1 and 48.6. The six domains of self-efficacy were positively associated with the majority of the domains of HRQoL, as depicted in Table 1.

Conclusion: Low disease self-efficacy in the management of SLE negatively correlated with HRQoL. The impact of the improvement of self-efficacy in the HRQoL should be evaluated prospectively.

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SAT0213

PREGNANCY AND UNDIFFERENTIATED CONNECTIVE TISSUE DISEASE: OUTCOME AND RISK OF FLARE IN 100 PREGNANCIES

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Background: Undifferentiated connective tissue disease (UCTD) is a group of systemic autoimmune conditions which do not fulfil the criteria for a definite connective tissue disease (CTD). The interaction between pregnancy and UCTD is still poorly studied and scarcely recognized.

Objectives: The purpose of this study was to evaluate the risk of disease flares or differentiation into a well-defined CTD and also the risk of adverse outcome in pregnancy in patients with UCTD.

Methods: A total of 100 pregnancies in 81 UCTD followed at a single center were included in this analysis. From the time the pregnancy was detected, each patient was evaluated every 4 – 6 weeks and the diagnosis was re-evaluated at each observation; the follow-up was considered completed after the last visit during puerperium. At each visit, patients were assessed by a rheumatologist and by a gynecologist.

Results: Eleven pregnancies (11%) ended with abortion in the first trimester and the remaining 89 (89%) ended with a live birth. Twelve patients (12%) flared during pregnancy or puerperium and three (3%) had major flares and evolved to systemic lupus erythematosus (SLE) with renal involvement. Obstetric complications were observed in twenty-nine out of the 89 successful pregnancy (33%), including two cases (2%) of pre-eclampsia. We found a significant association between anti-dsDNA antibodies positivity at baseline and disease flare ($p < 0.01$), while disease activity at the beginning of pregnancy was associated with flare ($p < 0.01$) and also with cumulative obstetric complications ($p < 0.05$).

Conclusion: The impact of pregnancy appears to be less serious in UCTD than in other CTDs, however disease flares and obstetric complications can represent a clinical challenge; disease clinical and serological activity seem important determinants of pregnancy outcomes. Thus, a pre-pregnancy counselling and planning as well as a close monitoring during pregnancy is warranted.

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