

Cardiac involvement and lupus nephritis (LN) were developed in 20% of patients. About 13.75% of patients had neurological manifestations, 26.5% articular complications, 16% vascular involvement and 10% of them developed infectious complications. Eight percent of these infections were diagnosed concomitantly with the diagnosis of SLE and 92% of them after the diagnosis of lupus with an average of 25 months. About 52.9% of the patients developed more than 2 episodes of infection. The spectrum of infectious complications was: pulmonary in 33.3%, urinary in 22.2% and cutaneous in 13.9%. Tuberculosis was the most frequent infection 12.5%. Lupus flare complicated the infection in 28.6% of patients with mean SLEDAI score at 10. Comparative study between group 1 and group 2 revealed that LN, corticosteroids and immunosuppressors were associated with a high risk of infection ($p=0.002$, $p=0.017$ and $p=0.034$ respectively). In multivariate analysis only LN was an independent predictive factor (OR=3.5, 95% CI=1.06-12.87, $p=0.049$).

Conclusions: Infections may complicate the course of SLE with flares presenting in 1/3 of cases. Half of the patients had more than 2 episodes of infection during their follow up. The presence of LN represents a predictive factor of such complication.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3009

AB0518 NEW 2016 ACR/EULAR CLASSIFICATION CRITERIA FOR SJÖGREN SYNDROME: USEFULNESS AND APPLICABILITY IN CLINICAL PRACTICE

M. Retuerto Guerrero¹, L. Sierra Herranz², C. Moriano Morales¹, C. Iñiguez Ubiaga¹, M. Garijo Bufort¹, A. Crespo Golmar¹, C. Álvarez Castro¹, E. Díez Álvarez¹, A. López Robles¹, M. Martín Martínez¹, T. Perez Sandoval¹.
¹Rheumatology Department; ²Pneumology Department, University Health Care Complex of León, Leon, Spain

Background: The Sjögren syndrome (SS) is an autoimmune disease where the cellular and humoral mechanisms affect the exocrine glands. In 2016, new classification criteria validated by ACR and EULAR were established.

Objectives: To compare the new criteria with those used so far in our hospital, as well as to assess the need for changes in the current diagnostic strategy.

Methods: Retrospective observational study in which 65 patients diagnosed with SS at the Hospital of León were randomly included. We reviewed the diagnostic tests performed and the fulfillment of the different classification criteria developed since 1993. Other variables studied were: sex; age at the time of diagnosis and the months from the onset of symptoms; xerostomia and xerophthalmia; extraglandular involvement, ESSDAI; immunosuppression; Raynaud; lymphoma development; and analytical alterations.

Results: The mean age at the time of diagnosis was 54.9 years ± 14 | 23–82 |, with an average of months from the onset of symptoms to the diagnosis of 10.2 ± 9.5 | 0–36|. 90.8% were women. 87.7% presented xerostomia; and 91% showed xerophthalmia, being severe in 43.1%. 64.6% had extraglandular manifestations; being the most prevalent the joint manifestation (60%) and the cutaneous one (18.4%). Over the past year, 37% developed haematological alterations in the form of cytopenias, and 73% biological alterations. At the time of the study, 32.8% presented low activity, 38.5% moderate activity and 9.2% high activity, measured by ESSDAI; being higher in anti-Ro positive patients ($p=0.011$). There was no association between ESSDAI and other antibodies, Raynaud or severe ocular involvement. 10.8% required systemic immunosuppression (RTX 5, AZA 2) and 18.5% needed ocular immunosuppression (topical cyclosporine). Only one patient developed lymphoma.

A Schirmer's test (ST) was performed in 92.3% (positive in 89.2%), saving the Van Bijsterveld test for patients with severe ocular involvement. The Ocular Staining Score (OSS) was not performed in any patient.

The scintigraphy of the salivary glands was positive in 70.8% of the patients and was not performed in 21.5%. The parotid sialography was only performed in two patients and the study of the salivary flow was not stimulated in none of them. Regarding the autoimmunity, 80% presented positive antiRo; 61.5% antiLa; 89% ANA; 61.5% RF; 43% quadruple positivity.

Labial gland biopsy was performed only in 18.4%, with a positive result in 75%.

All patients met the 1993 European Criteria; 86.2% met the European-American criteria of 2002; and only 10.8% met the SICCA-ACR Criteria. The new criteria validated by ACR and EULAR were verified in 80%. Four patients who fulfilled the European criteria did not meet the new criteria, coinciding with those patients with negative ST, but positive scintigraphy.

Conclusions: In our hospital, the method for electing the xerostomia study was the salivary scintigraphy; therefore, we cannot establish direct comparisons with the new criteria.

The incorporation of non-stimulated salivary flow in our diagnostic strategy is necessary.

We should consider conducting a lip biopsy more systematically for histological confirmation since there are no validated diagnostic criteria.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5255

AB0519 LABORATORY ABNORMALITIES IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

M. Fernandez Castro¹, J.L. Andreu², C. Sanchez-Piedra³, V. Martínez Taboada⁴, A. Olive⁵, J. Rosas⁶ on behalf of SJOGRENSER group, part of the Spanish Society of Rheumatology Systemic Autoimmune Diseases Study Group (EASSER). ¹Rheumatology, Hospital Infanta Sofía; ²Rheumatology, Hospital Puerta de Hierro Majadahonda; ³Research unit, Spanish Society of Rheumatology; ⁴Rheumatology, Hospital Marqués de Valdecilla, Madrid; ⁵Rheumatology, Hospital Hospital Germans Trias i Pujol, Barcelona; ⁶Rheumatology, Hospital Hospital Marina Baixa, Alicante, Spain

Background: Primary Sjögren's syndrome (pSS) is a chronic systemic autoimmune disease often accompanied by analytical abnormalities. Altered levels in serum protein concentration, blood cell count and autoantibodies contribute to the broad spectrum of biological manifestations that characterize pSS.

Objectives: The objective of this study is to evaluate the presence of laboratory abnormalities in patients with pSS from the SjogrenSER registry.

Methods: We conducted a multicentre transversal study of a cohort of pSS patients fulfilling 2002 European/American criteria, from 33 Spanish rheumatology departments. Every patient was interviewed for data collection and signed an informed consent. Data were also collected by reviewing medical records. Local ethics committees approved the study. Variables were analysed by descriptive statistical methods, using means, medians and rates. Chi-square was used to establish the statistical associations. A $p<0.05$ was considered significant.

Results: Four hundred and thirty-seven patients were included. Ninety-five percent of them were women. The median age of the cohort was 58 years. AntiRo antibodies were present in 93.6% of patients and AntiLa antibodies in 67.3% of patients. All patients were ANA+. Rheumatoid factor (RF) was positive in 64.8% of patients. Low levels of C3 and C4 were observed in 14.87% and 14.19% of patients, respectively. Polyclonal hypergammaglobulinemia (HGG) was present in 53% of patients. Thirteen patients had cryoglobulins (2.97%). An increase in β 2microglobulin was observed in 22.2% of patients. Fifty-six percent of the patients had hematological involvement: 29% of the patients had anemia, 38% had leukopenia (38% lymphopenia, 10.5% had neutropenia), and 9% had thrombocytopenia. The median ESR was 25 mm. Age at diagnosis and age at onset of symptoms were significantly lower in patients presenting RF+ vs RF- (48.71 vs 53.73, $p<0.001$ and 44.76 vs 49.53, $p=0.001$, respectively), decreased C3 vs normal C3 (45.66 vs 51.18, $p=0.004$ and 42.2 vs 46.99, $p=0.018$, respectively), decreased C4 vs normal C4 (47.02 vs 50.89, $P=0.042$, for age at diagnosis) and HGG (47.59 vs 54, $p<0.001$, and 43.44 vs 50.16, $p<0.001$, respectively). ESR was significantly higher in patients with hematological involvement (35.94 vs 26.24, $p<0.001$), RF+ (36.39 vs 22.91, $p<0.001$), decreased C3 (37.8 vs 30.53, $p=0.026$) and C4 (38.71 vs 30.42, $p=0.04$), HGG (36.21 vs 26.03, $p<0.001$) and increased β 2microglobulin (38.80 vs 29.71, $p=0.009$). ESSDAI (Eular Sjögren Syndrome Disease Activity Index) was significantly higher in patients with haematological involvement (5.58 vs 3.69, $p<0.001$), RF+ (5.40 vs 3.53, $p<0.001$) and HGG (5.31 vs 3.93, $P=0.011$). The median ESSDAI score was 2 (P25-P75, 0–4).

Conclusions: In SjogrenSER registry all patients were serologically positive. More than half of the patients presented abnormalities in serum proteins and 14% had hypocomplementemia. More than half of the patients had abnormalities, mostly leucopenia and lymphopenia. Patients with analytical alterations were younger at the time of diagnosis and had more often elevated ESR and higher ESSDAI score.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.2603

AB0520 THE ROLE OF LEPTIN IN SJÖGREN'S DISEASE

M. Erdoğan¹, M.E. Tezcan², K. Başçak³. ¹Internal medicine division of Rheumatology, Cerrahpaşa Medical Faculty; ²Internal medicine division of Rheumatology; ³Pathology, Dr. Lütfi Kırdar Kartal Training and Research Hospital, Istanbul, Turkey

Background: Sjogren's disease (SD) is a multisystemic disease mostly manifest with sicca symptoms. Lymphocytic infiltration of the glandular and extra glandular organs is the dominant pathologic feature of the disease. Multiple stimulators were accused in the pathogenesis of SD. Leptin, an endogenous peptide, involves in various metabolic processes as well as influence immune system (1). Increased serum leptin level is observed in patients with autoimmune diseases such as SD, systemic lupus erythematosus and rheumatoid arthritis when compared to healthy controls (2).

Objectives: Even if serum leptin level increases in the patient with SD, there is no data about its effect on exocrine glands. We aimed to compare density of leptin in the salivary gland of SD patients with control group. Furthermore we evaluated the relation between intensity of lymphocytic infiltration and density of leptin in the salivary glands of SD patients

Methods: We applied leptin immunostain to minor salivary glands samples of 24 SD patients, who were fulfilled American College of Rheumatology Sjögren's Disease Classification Criteria (ACR-SDCC) and 19 patients who undergo minor salivary gland biopsy due to clinically on suspicion of SD but not fulfilling the ACR-SDCC and had no lymphocytic focus on biopsy. Herein, leptin density in acinar and ductal structures of the salivary glands were evaluated in both groups. Moreover,

minor salivary gland samples of SD patients were also assessed for relationship between focus score, disease progression (evaluated with SSDAI) and leptin immunostaining.

Results: Demographic features of both group were similar. Furthermore, there were no difference in leptin staining features of both group. Additionally, we found that higher focus score (>2) was associated with more diffuse leptin staining and higher SSDAI scores related with diffuse acinar staining.

Figure 1. Total leptin Satining in Different Focus Score Groups

		Total Leptin Staining			Total
Focus Score		≤2	3-4	≥5	
Focus 1		2	1	3	6
Focus 2		0	9	3	12
Focus Score >2		0	0	6	6
Total		2	10	12	24

*p=0.02

Figure 2. Stromal Leptin Staining in Different Focus Groups

		Stromal staining				Total
Focus Score		No Staining	Focal	Modest	Wide	
Focus 1		1	3	2	0	6
Focus 2		0	9	1	2	12
Focus >2		0	0	0	6	6
Total		1	12	3	8	24

*p=0.001

Conclusions: Different leptin staining features in higher focus score and higher disease activity might indicate the role of leptin especially in more significant disease. Leptin may locally stimulate chemotaxis and activate infiltration of glands with inflammatory cells. We suggested further studies aimed to understand autocrine effect of leptin and evaluate its role in SD pathogenesis

References:

- [1] Stofkova, A. Leptin and adiponectin: from energy and metabolic dysbalance to inflammation and autoimmunity. *Endocrine regulations*, 2009, 43.4: 157–168.
- [2] Vadacca, Marta, et al. Leptin in immuno-rheumatological diseases. *Cellular & molecular immunology*, 2011, 8.3: 203–212.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5407

AB0521 ANTIPHOSPHOLIPID SYNDROME - ATHEROSCLEROSIS AND CLINICAL-IMUNOLOGICAL CORRELATIONS

N. Stoilov¹, V. Boyadzhieva², R. Rashkov¹. ¹*Clinic of Rheumatology*; ²*Clinic of Rheumatolog, UMBAL "Sv. Ivan Rilski", Sofia, Bulgaria*

Background: Antiphospholipid syndrome (APS) is an autoimmune, multisystem disease characterized by thrombocytopenia, venous and/or arterial thrombosis, pathological course of pregnancy in women (preeclampsia, eclampsia, miscarriage) and the presence of a heterogeneous group of antibodies - antiphospholipid antibodies. Recent studies show that in the pathogenesis of atherosclerotic process relevant inflammatory component of the immune response, as well as elements of autoimmunity (autoantibodies and autoantigens autoreactive lymphocytes). A number of autoimmune rheumatic diseases, including RA, SLE and API are characterized by accelerated atherosclerosis and therefore an increased risk of cardiovascular morbidity and mortality.

Objectives: The aim of the study was to investigate the incidence of cardiovascular events and atherosclerosis in patients with primary and secondary antiphospholipid syndrome, spiamo healthy subjects and patients with systemic lupus erythematosus without antiphospholipid antibodies.

Objectives of the study:

- To compare the damage to aa. Carotes in patients with APS compared to healthy subjects and patients with SLE without antifosfolipindi antibodies.
- To compare Are score in patients with APS compared to healthy individuals without antifosfolipindi antibodies.
- To compare atherosclerosis of aorta in patients with APS compared to healthy subjects and patients with SLE without antifosfolipindi antibodies.
- To compare cutaneous vascular lesions (Raynaud, Livedo reticularis, periungual vasculitis, son pulp gangrene, asphyxia, vasculitis lesions) on the limbs and body in patients with API spiamo healthy subjects and patients with SLE without antifosfolipindi antibodies.

Methods: For the purpose of this study examined 127 patients, 18 men (14%) and 109 women (86%), positive antiphospholipid antibodies. Patients were selected from the Department of Rheumatology, University Hospital "St. Ivan Rilski" – Sofia.

All the patients were tested for: ANA, aPL, standart laboratory tests.

Instrumental methods:

- calcium score of a. coronaria sinister, a. anterior descendens sinister, a. circumflexa sinister, a. coronaria dexter, Aorta, Valva aorte.

- Ultrasonographic examination of aa. Carotes to measure the Intima-media thickness.

Results: It is proved strong, statistically significant correlation between aCL antibodies and the presence of plaques in the left common carotid artery (p=0.041). Absent the dependence between the antibody titers and incidence of carotid plaques.

In the group with APS, 33,3% (14) establishes a positive calcium score of coronary areril, 11.9% (5) plozhitelnite for aorta. Aortic valve Absent deposits. In the control group positive calcium score is when one person (5.88%).

Conclusions: We found that patients with antiphospholipid syndrome suffer from early developmentof atherosclerosis. In the process of atherogenesis involved inflammatory componentof immune response. Atherosclerosis can be viewed as an inflammatory autoimmune disease.

It is proved strong, statistically significant correlation between aCL antibodies and the presence of plaques in the left common carotid artery (p=0.041). Absent the dependence between the antibody titers and incidence of carotid plaques.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.6615

AB0522 CLINICAL FINDINGS AND THEIR RELATIONSHIP WITH THE PROFILE OF ANTIPHOSPHOLIPID ANTIBODIES IN DOMINICAN PATIENTS

R. Vasquez-Colon¹, P. Gottschalk¹, C. Tineo¹, P. Lopez¹, R. Tejada², E. Loyo¹. ¹*Reumatologia, Hospital Regional Universitario Jose Maria Cabral y Baez*; ²*Investigaciones Clinicas, Pontificia Universidad Catolica Madre y Maestra, Santiago, Dominican Republic*

Background: There is an increased risk of thrombotic events and obstetric morbidities in individuals with antiphospholipid antibodies (APAs) compared with the general population. The risk of complications is further increased in those patients who have a rheumatic diseases and antibody positivity.

Objectives: The purpose of this study is to determine the clinical findings and their relationship with the profile of antiphospholipid antibodies in patients with rheumatic disease, of the Division of Rheumatology of the Hospital Regional Universitario José Ma. Cabral y Baez, Dominican Republic.

Methods: Patients with 18 years of age and above, with a confirmed rheumatic disease was eligible for enrollment; those with positive titers for APAs, that met the inclusion and exclusion criteria, were included in our study. The institutional review board approved the protocol.

This is a transverse study, with retro-prospective data gathering from patients and their medical records. Demographic information at the time of APA measurement and medical information regarding the rheumatic disease and clinical course were collected from the patient's medical record, with a follow-up of 10 years.

Results: 40 patients were included in this study. The male to female ratio was 19:1; mean age was 36±10 years. A large number of patients (13 patients, 32.5%) were asymptomatic for antiphospholipid syndrome (APS) at the time of this study; eight patients (20%) were carriers without defining manifestations. Ten patients (25%) were categorized as vascular APS and five patients (12.5%) as obstetric APS; three patients (7.5%) had vascular and obstetric APS. One patient presented with catastrophic APS. In evaluating such specific profile of antiphospholipid antibodies, aCL was observed that corresponded to the antibody most frequently identified with IgG isotypes (52.5%) and IgM 47.5%. The lupus anticoagulant (LA) corresponded to the second most common (37.5%). The isotypes of the anti-B2GP-I were identified in less proportion. We report 89 pregnancies during the follow, with 29 abortions and 60 live births, of which 12 were premature and 11 born with intrauterine growth restrictions.

Conclusions: The most frequent clinical manifestations were livedo reticularis, vascular thrombosis in lower extremities, Raynaud's phenomenon, migraine, cerebrovascular disease, thrombocytopenia, leukopenia, and alteration of urine sediment.

References:

- [1] Hughes GR. Antiphospholipid Syndrome Hughes Syndrome: 10 Clinical Topics. *Lupus* 2010; 19:343–6.
- [2] Musial J. Antiphospholipid Antibodies and Thrombosis. *Thromb Res* 2012; 129:345–7.
- [3] Erkan D, Barbhaiya M, George D et al. Moderate Versus High-Titer Persistently Anticardiolipin Antibody Positive Patients: Are They Clinically Different and Does High-Titer Anti-Beta 2-Glycoprotein-I Antibody Positivity Offer Additional Predictive Information? *Lupus* 2010; 19:613–9.
- [4] Petri M. Update on Anti-Phospholipid Antibodies in SLE: The Hopkins' Lupus Cohort. *Lupus* 2010; 19:419–23.
- [5] Tarr T, Lakos G, Bhattoa HP et al. Analysis of Risk Factors for the Development of Thrombotic Complications in Antiphospholipid Antibody Positive Lupus Patients. *Lupus* 2007; 16: 39–45.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4135