

antibodies ( $P < 0.01$ ). In multivariate analysis, there were significant association between Apgar scores at five minutes and the titer of anti-dsDNA antibodies ( $P < 0.01$ , Table 1).

**Abstract AB0561 Table 1.** Multivariate analysis of risk factor for Apgar score at 5 minutes

Variable	Standard $\beta$	P-value
SLEDAI at third trimester	0.361	0.05
C3 at conception	0.068	0.62
Anti-dsDNA antibody at conception	-0.964	< 0.01*
( $R^2=0.589$ , $P<0.001$ )		
Variable	Standard $\beta$	P-value
SLEDAI at third trimester	0.367	0.06
C4 at conception	0.047	0.74
Anti-dsDNA antibody at conception	-0.973	< 0.01*
( $R^2=0.589$ , $P<0.001$ )		
Variable	Standard $\beta$	P-value
SLEDAI at third trimester	0.400	0.03*
CH50 at conception	0.162	0.22
Anti-dsDNA antibody at conception	-0.969	< 0.01*
( $R^2=0.610$ , $P<0.001$ )		

**Conclusion:** In SLE, immunological abnormalities at conception, high SLEDAI and glucocorticoid doses were risk factors for preterm birth and having a LFD newborn. Apgar scores at five minutes were significantly associated with the titer of anti-dsDNA antibodies. Minimizing disease activity before pregnancy may decrease risks for mothers and their newborns. In preconception counseling, it is important for rheumatologists to explain these risk factors to patients with SLE who hope to conceive. There is a need for long-term follow-up studies focusing on the neurological development of children born from SLE mothers.

#### REFERENCES

- [1] Clowse ME, Jamison M, Myers E, James AH. A national study of the complications of lupus in pregnancy. *Am J Obstet Gynecol* 2008;199:127.e1-6.
- [2] Bundhun PK, Soogond MZ, Huang F. Impact of systemic lupus erythematosus on maternal and fetal outcomes following pregnancy: a meta-analysis of studies published between years 2001–2016. *J Autoimmun* 2017;79:17-27.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.4530

AB0562

#### CARDIOVASCULAR RISK FACTORS AND FRAMINGHAM RISK SCORE IN PRIMARY SJÖGREN SYNDROME PATIENTS: A COMPARATIVE STUDY WITH MATCHED CONTROLS

Joana Silva<sup>1</sup>, Daniela Faria<sup>1</sup>, Joana Neves<sup>2</sup>, Marcos Cerqueira<sup>2</sup>, Joana Rodrigues<sup>1</sup>, Soraia Azevedo<sup>1</sup>, José Tavares-Costa<sup>1</sup>, Filipa Teixeira<sup>1</sup>, Carmo Afonso<sup>1</sup>, Daniela Peixoto<sup>1</sup>. <sup>1</sup>Unidade Local de Saúde do Alto Minho, *Rheumatology, Ponte de Lima, Portugal*; <sup>2</sup>Hospital de Braga, *Rheumatology, Braga, Portugal*

**Background:** The association between cardiovascular (CV) risk and chronic systemic inflammatory diseases has been an issue of debate. There is compelling evidence of increased CV morbidity in conditions such as rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE) (1). Primary Sjögren's syndrome (pSS) is a chronic immune-mediated disease characterized by glandular and systemic manifestations, sharing clinical and immunological similarities with RA and SLE. However, in pSS patients the weight of cardiovascular disease attributed to traditional CV risk factors remains unclear.

**Objectives:** To determine the prevalence of traditional CV risk factors and long-term CV events based on the risk prediction tool of the Framingham risk score (FRS) in pSS patients.

**Methods:** The study included patients diagnosed with pSS, fulfilling both the 2016 ACR/EULAR and 2002 AECG criteria for the disease, followed-up at our Rheumatology department and 49 age and sex-matched controls. Inclusion criteria were age 30 to 74 and no history of CV events in order to calculate the FRS. In total, 46 out of 54 patients were eligible for the study. Data on the prevalence of traditional CV risk factors (diabetes, arterial hypertension and smoking), systolic blood pressure (SBP) values, total and high-density lipoprotein (HDL) cholesterol levels were collected and compared between groups. The 10-year risk for CV events according to FRS was calculated and means of patients and controls were compared. Parametric and nonparametric tests were used and the level of significance was defined as  $p<0.05$ .

**Results:** The mean age of pSS patients and healthy individuals was 58.0  $\pm$ 11.6 and 54.1 $\pm$ 13.6 years, respectively. The prevalence of arterial

hypertension was higher in pSS patients than controls (52.2% versus 24.5%,  $p=0.005$ ). The prevalence of diabetes and smoking did not differ significantly between the two groups ( $p=0.674$  and  $p=0.949$ , respectively). The SBP values, total and HDL cholesterol levels were also similar between pSS patients and healthy subjects ( $p=0.063$ ,  $p=0.413$  and  $p=0.217$ , respectively). Mean 10-years risk for CV events assessed by FRS was 11.8 $\pm$ 8.3 for pSS patients and 7.8 $\pm$ 8.4 for matched controls, with statistically significant difference ( $p=0.013$ ).

**Conclusion:** In our study, pSS patients had a higher prevalence of arterial hypertension, which is in agreement with the M. Juarez *et al* (1) study. Although there were no significant differences in the other traditional CV risk factors, the results showed an increased 10-year risk for major CV events based on FRS assessment in pSS patients in comparison to age and sex-matched controls.

#### REFERENCES

- [1] M. Juarez, et al. Cardiovascular Risk Factors in Women With Primary Sjögren's Syndrome: United Kingdom Primary Sjögren's Syndrome Registry Results. *Arthritis Care & Research*. Vol. 66, No. 5, May 2014, pp 757-764.

**Disclosure of Interests:** None declared

**DOI:** 10.1136/annrheumdis-2019-eular.7191

AB0563

#### TRAUMA AND SLE-CONSIDERATIONS REGARDING A GROUP OF PATIENTS FROM ROMANIA

Ana Alwina Stan, Monica Copotioiu. *Tirgu-Mures Emergency Clinical County Hospital, Rheumatology, Tirgu-Mures, Romania*

**Background:** Systemic lupus erythematosus (SLE) represents a complex disease, which hasn't got a clear etiology established yet. Many genetic-susceptibility factors, environmental triggers, antigen-antibody (Ab) responses, B-cell and T-cell interactions, and immune clearance processes interact to generate and perpetuate autoimmunity. One of the triggers could be trauma-surgeries, serious infections or accidents.

**Objectives:** To assess the presence of history of trauma in patients diagnosed with SLE admitted in our Department, as well as the association with different co-morbidities.

**Methods:** We included 62 patients, admitted in the Rheumatology Department of the Tirgu-Mures Emergency Clinical County Hospital between 01.01.2018-29.01.2019, previously diagnosed with SLE. We performed a retrospective analysis of their medical documents, looking for evidence of traumatic risk factors.

**Results:** The majority of the patients were female (17=88.70%) and had some kind of trauma before being diagnosed with SLE (17=27.41%). Among the operations the most frequent were hysterectomy with bilateral oophorectomy and classical appendectomy, respectively (6=9.67% each), followed by cholecystectomy and tonsillectomy (2=3.22%). There were also one case of cerebral injury following a car accident and a complicated peritonitis-related to IUD extraction. The majority of co-morbidities was represented by neurologic involvement (16=25.80%), followed by thyroid (13=20.96%) and renal involvement (12=19.35%).

**Conclusion:** Patients with SLE from our department have a significant history of traumatic triggers, mainly open surgeries, which might explain the development of autoimmunity. They also have various organ involvement that sometimes warrants aggressive measures. Further studies have to be conducted in order to better examine the possible link between traumatic events and development of this multifaceted disease.

#### REFERENCES

- [1] Christie M Bartels- Systemic lupus erythematosus (SLE) on Medscape Drugs & Diseases

**Disclosure of Interests:** Ana Alwina Stan Grant/research support from: Novartis, Monica Copotioiu Grant/research support from: Novartis

**DOI:** 10.1136/annrheumdis-2019-eular.1814

AB0564

#### THE CONTROVERSIAL ROWELL SYNDROME: TO BE OR NOT TO BE?

Daisy AM Vaida-Voevod<sup>1</sup>, Ioana Felea<sup>1</sup>, Laura Damian<sup>1</sup>, Cristina Pamfil<sup>2</sup>, Simona Rednic<sup>1,2</sup>. <sup>1</sup>Emergency County Hospital Cluj, *Rheumatology, Cluj-Napoca, Romania*; <sup>2</sup>University of Medicine and Pharmacy Iuliu Hatieganu, *Rheumatology, Cluj-Napoca, Romania*

**Background:** Rowell syndrome is a rather rare and highly debated entity, initially defined by Rowell et al as discoid lupus associated with

erythema multiforme-like (EM) lesions, positive speckled ANA, RF and Anti-SJT antibody, later known as anti Ro/La antibodies. In 2000, Zeitouni et al extended the definition by including all types of systemic lupus erythematosus (SLE) and proposed major and minor criteria, while in 2012 Torchia et al proposed another set of criteria defining Rowell syndrome as a distinct subtype of chronic cutaneous lupus. To date, Rowell syndrome as a distinct entity remains in question.

**Objectives:** To establish whether patients with clinically suggestive Rowell syndrome, meet the proposed criteria and form a distinct SLE subgroup.

**Methods:** A retrospective study which included SLE patients who associated EM-like lesions was carried out in the Rheumatology Department Cluj-Napoca, between 2008 and 2019. Clinical, immunological and histopathological parameters were recorded.

**Results:** Among 200 patients who fulfilled the 2012 SLICC criteria, 12 patients with target lesions, resembling EM, were identified. Four patients were excluded: 3 were not fully investigated and 1 was *My. pneumoniae* positive, thus 8 patients were studied. The majority of patients (87.5%) developed the cutaneous lesions after diagnosis. In all cases, the erythematous maculopapular rash with targetoid aspect was present, with poorly defined borders and a dusky center and a diameter between 2 to 6 cm. The lesions extended to the trunk and limbs, sparing the acral and mucosal areas. Five patients associated pruritus. The lesions could not be linked to any viral or bacterial infection in any of the cases. With regard to drug allergies, a link with AZA and HCQ was suspected in three patients – which was infirmed.

The majority of patients (87.5%) had negative anti-ds DNA, 87.5% presented speckled pattern ANA, one patient exhibited ANA rods and rings pattern, with a negative serology for B and C hepatitis and no antiviral therapy. Of note, 25% had positive rheumatoid factor, 87.5% had positive anti-Ro antibody and 37.5% of patients exhibited chilblains.

The first three classifications were tested on all patients: 25% met Rowell's criteria, 12.5% met Lee's criteria and 87.5% met Zeitouni's criteria, with only 1 patient meeting all 3, and 1 patient meeting none of them.

In the cases in which the SLE etiology of the lesion was in question from a clinical point of view, a biopsy was performed. In one case the histopathological examination described lymphocytic infiltrates and few eosinophils in the dermis, suggestive of drug allergy. Interestingly, this patient met all 3 classification criteria. Another report described thin epidermis, parakeratosis, dyskeratosis and spongiosis with dermis and perivascular lymphocytic infiltrate- findings highly suggestive for EM; this report belonged to the patient who met neither of the 3 classifications, but who associated a rods and rings ANA pattern. The third histopathological report was inconclusive.

**Conclusion:** Our study shows that patients with suspected clinical, immunological or histological Rowell syndrome do not meet all studied classifications criteria. Furthermore, studied classifications are incongruent. Should Rowell syndrome be a distinct entity it would most certainly be a very rare one. Further study is needed to better frame LES and EM.

## REFERENCES

- [1] ROWELL, N. R. (1963). *Lupus Erythematosus and Erythema Multiforme-like Lesions*. Archives of Dermatology, 88(2), 176.
- [2] Torchia, D., Romanelli, P., & Kerdel, F. A. (2012). *Erythema multiforme and Stevens-Johnson syndrome/toxic epidermal necrolysis associated with lupus erythematosus*. Journal of the American Academy of Dermatology, 67(3), 417–421.

**Disclosure of Interests:** None declared

DOI: 10.1136/annrheumdis-2019-eular.7814

## AB0565 EXPERIENCE IN THE USUAL PRACTICE OF PATIENTS WITH INFLAMMATORY MYOPATHIES AT THE DONOSTIA UNIVERSITY HOSPITAL

Jesús Alejandro Valero Jaimes, Andrea De Diego Sola, Cesar Antonio Egües Dubuc, Luis María Lopez Dominguez, Olga Maiz-Alonso, Esther Uriarte Isacelaya, Jorge Jesús Cancio Fanlo, Joaquín María Belzunegui Otano. *University Hospital Donostia, Rheumatology, San Sebastian, Spain*

**Background:** Inflammatory myopathies (IM) are a heterogeneous group of acquired diseases, characterized by the presence of muscle weakness and inflammation. This group includes idiopathic polymyositis (PM), idiopathic dermatomyositis (DM), PM/DM associated with neoplasia, associated with rheumatic autoimmune diseases, juvenile PM/DM, inclusion body myositis (MCI) and immunomediated necrotizing myopathies (IMNM).

**Objectives:** Inflammatory myopathies (IM) are a heterogeneous group of acquired diseases, characterized by the presence of muscle weakness and inflammation. This group includes idiopathic polymyositis (PM), idiopathic dermatomyositis (DM), PM/DM associated with neoplasia,

associated with rheumatic autoimmune diseases, juvenile PM/DM, inclusion body myositis (MCI) and immunomediated necrotizing myopathies (IMNM).

**Methods:** A retrospective search of all patients assessed in the service diagnosed with IM was performed. The computerized medical records were reviewed. The variables collected were: sex, age, underlying disease and immunosuppressive and biological treatments used, antibodies, and complementary tests. The immunosuppressant sought were methotrexate (MTX), azathioprine (AZA), hydroxychloroquine (HCQ), tacrolimus, mycophenolate (MMF), cyclophosphamide (CFM), cyclosporine (CsA), chloroquine; intravenous immunoglobulins (IVIG), rituximab (RTX). The quantitative variables are shown with the median and interquartile range; the qualitative ones are shown with the absolute value and its percentage

**Results:** 42 patients were found diagnosed with IM; the average age of diagnosis was 54 years, with a predominance of women with 71.4%. Table 1 shows the clinical characteristics, complementary tests and treatments used in these patients. The registered deaths were 8 (19%); of which 6 (75%) were related to their cancer, one patient with IM with pulmonary involvement died in the context of a respiratory infection at 91 years of age, and the other patient in the context of a bowel obstruction with 87 years of age. Two (4.7%) patients presented an overlap syndrome, one with scleroderma and the other with systemic lupus erythematosus. The median CPK was higher at the time of diagnosis in patients in the IM group with pulmonary involvement. We also observed a greater involvement of the swallowing muscles, 7 (16%) in patients with IM associated with malignancy, and those who were more associated in the initial IVIG treatment, 9 (21%). The mean follow-up time of these patients is 94 months. The most widely used immunosuppressant drug was MTX 76%; followed by 50% IVIG and 38% AZA; among those who maintain current treatment the most used is MTX 28% second of RTX 17%.

**Conclusion:** Despite the fact that IM are a serious disease, more than 80% of patients continue to follow up, IM presented more aggressively in IM patients associated with malignancy, and presented less aggressively in patients diagnosed at the juvenile age. In 40% of the patients, no specific antibody was found; possibly due to the fact that most of these patients were diagnosed more than 7 years ago, where the antibody pool was much more restricted than today's

**Disclosure of Interests:** Jesús Alejandro Valero Jaimes: None declared, Andrea De Diego Sola: None declared, Cesar Antonio Egües Dubuc Speakers bureau: Lilly pharma, Luis María Lopez Dominguez: None declared, Olga Maiz-Alonso Speakers bureau: Pfizer, Esther Uriarte Isacelaya: None declared, Jorge Jesús Cancio Fanlo Speakers bureau: janssen pharma, Joaquín María Belzunegui Otano: None declared  
DOI: 10.1136/annrheumdis-2019-eular.5946

AB0566

## POLYAUTOIMMUNITY AND MAJOR ORGAN INVOLVEMENT PREVALENCE IN SJÖGREN'S SYNDROME: THYROID, LIVER, LUNG AND KIDNEY AS TARGETS. A SINGLE CENTER CROSS SECTIONAL STUDY

Larissa Valor, Hannah Schenker, Melanie Hagen, Johannes Knitza, Jürgen Rech, Georg Schett. *Friedrich-Alexander-University Erlangen-Nürnberg, Department of Internal Medicine 3 – Rheumatology and Immunology, Erlangen, Germany*

**Background:** Polyautoimmunity has been described to be associated with primary Sjögren's syndrome (SjS) and the most frequent observed associated autoimmune diseases (AID) are autoimmune thyroid disease, autoimmune hepatitis and primary biliary cirrhosis, which are common organ-specific AID. In the same track, renal and lung involvement has increasingly been documented in SjS further highlighting its systemic nature.

**Objectives:** To describe and classify prevalence of polyautoimmunity and major organ involvement in a primary SjS-cohort.

**Methods:** This cross-sectional study included 179 patients [160 (89%) females and 19 (11%) males] diagnosed with primary SjS and fulfilling the ACR classification criteria (1) that had been admitted to our outpatient clinic between December 2008 and December 2018. Demographic and disease-specific characteristics were recorded in all patients.

**Results:** In our cohort the median age at diagnosis was 57 years (range: 20-85). Thyroid AID was found in 55/179 (30%) patients, with the following distribution: Hashimoto thyroiditis without (n=21) and with hypothyroidism (n=22), Graves's disease without (n=4) and with thyroidectomy (n=8). Liver AID was detected in 8/179 patients (4%), 3 patients with autoimmune hepatitis and 5 patients with primary biliary cirrhosis. Regarding major organ involvement, 20/179 (11%) patients had renal manifestations: renal insufficiency (n=12), glomerulonephritis (n= 3), interstitial nephritis (n=2) and IgA nephritis (n=3). Eight/179 (4%) patients had lung manifestations: interstitial fibrosis (n=6), emphysema (n=1) and chronic obstructive pulmonary disease (n=1).