ENTHESES ULTRASONOGRAPHY IN TUNISIAN PRIMARY SJÖGREN’S SYNDROME PATIENTS
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Background: Primary Sjögren’s Syndrome is an auto-immune disease characterised by dryness of the eyes and the oral cavity. Musculoskeletal manifestations are common. However, the underlying mechanism remains often unknown.

Objectives: The aim of the current study was to describe subclinical enthesal involvement in patients with Primary Sjögren’s Syndrome via ultrasound, to calculate a modified Madrid sonography enthesitis index and to compare it with a group of healthy controls.

Methods: The study was conducted in the rheumatology department of Mongi Slim hospital in Tunisia, between June 2015 and December 2017, including 29 patients with Primary Sjögren’s Syndrome and 25 healthy sex- and age-matched controls. Cases were defined according to the American-European Consensus Criteria for Sjögren’s Syndrome. All the included subjects underwent an enthesis ultrasound exploration (EsaoteMyLab 60 machine and a 13–18 MHz linear array transducer) by a rheumatologist experimented in ultrasound. Five enthesis locations bilaterally (distal Achilles tendon, distal and proximal patellar ligaments, distal quadriceps, and brachial triceps tendons) in each patient were explored. The following elemental lesions of enthesis were evaluated: thickening, presence of calcifications, erosions, enthophyse, loss of fibrillar pattern and power Doppler signal. The calculated index was compared by Mann-Whitney U test between cases and controls. The significance level was set at 5%.

Results: In our study population, the median age was 53.2±11.3 years and the median body mass index was 29.±6.4 kg/m2. All included subjects were female. The ultrasound abnormalities in the Primary Sjögren’s Syndrome were as follows: erosions in 19.2% of cases, enthophyse in 16.4% of cases, calcifications in 6% of cases, hypoechogenity in 2.8% of cases, thickening in 2.4% of cases, power Doppler signal in 1.6% of cases and loss of fibrillar pattern in 1.2% of cases. The total enthesitis index was 4.96±2.59 among cases and 5.72±2.92 among healthy controls. The calculated index was compared by Mann-Whitney U test between cases and controls. The significance level was set at 5%.

Conclusions: Our study did not find a significant enthesal involvement among patients with Primary Sjögren’s Syndrome that could explain the chronic indefinable pain. The diagnosis of an associated fibromyalgia should be kept in mind.

Disclosure of Interest: None declared

ANTHROSTOPHOLIPID SYNDROME COMPONENTS IN PATIENTS WITH CORONARY HEART DISEASE
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Background: Antiphospholipid antibodies (aPL), such as anti-cardiolipin antibodies (aCL), are the immunological markers of the antiphospholipid syndrome (APS).1 The aPL are found in association with venous and/or arterial thrombosis. Myocardial infarction (MI) is usually related to atherosclerosis and thrombosis of coronary arteries.2 The clinical significance of aPL in MI, however, has not yet been well established.

Objectives: To evaluate the presence and levels of aPL in patients with history of MI.

Methods: 50 patients (100% male) with average age 49.5±6.09 (M±SD) years with history of MI were examined. Serum IgG aPL (anti-cardiolipin, -phosphatidylserine, phosphatidylinositol, -phosphatidylacetate) were determined by enzyme-linked immunosorbent assay (ELSSA).

Results: IgG iso type aPL were detected in 26 (52%) patients with the history of MI and 24 patients were negative. The average age (M±SD) of aPL positive patients was 44.1±5.00 years and of aPL negative patients was 47.±4.83 years (p<0.01). The difference comprises more than 3.5 years. Patients with recurrent MI (two and more) had higher level of IgG aPL, then patients with one MI (18.02±7.53 v.s. 11.5±4.21 GPL-U/ml). The difference is significant (p<0.05).

Conclusions: Determined younger age of the first MI in aPL positive patients and higher level of IgG aPL in patients with recurrent MI indicate the possible involvement of the autoimmune factor in the pathogenesis of MI. This proves the necessity for further research in this direction.

REFERENCES:

FRAGMENTED QRS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: RELATION TO THE DISEASE ACTIVITY: A CROSS-SECTIONAL STUDY
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Background: Cardiovascular disease is an important contributor to mortality in Systemic Lupus Erythematosus (SLE).1 Fragmented QRS (fQRS) is an easily evaluated non-invasive electrocardiographic parameter defined as additional spikes within the QRS complex.2 fQRS can represent conduction disturbance and a predictor of cardiac events3. Even in a patient with SLE, it has reported that the prevalence of fQRS appears to be higher than in controls.4 However, no clinical studies have investigated the prevalence at the time of diagnosis. In addition, there is no report that examined the association of disease activity of SLE and fQRS.

Objectives: This study aimed to assess the relationship between disease activity of SLE and fQRS in Japanese SLE patients at the time of diagnosis. We hypothesised that the frequency of fQRS on ECGs would be greater in SLE patients with high disease activity.

Methods: The study design was a cross-sectional study. The participants were SLE patients who diagnosed at Showa University Hospital and Showa University Koto Toyosu Hospital from January 2010 to December 2017. The participants who satisfied American College of Rheumatology (ACR) criteria were included. The patients with already treatment at the time of an ECG measurement, cardiovascular disease, history of arrhythmia, cardiomyopathy, rheumatoid arthritis, systemic sclerosis were excluded. The exposure was the appearance of fQRS. The primary outcome was Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K). The secondary outcomes were the complement level, the ds-DNA antibody level and the organ involvement. In the main analysis, a multiple regression analysis was conducted to assess the association between fQRS and SLE activity adjusted for age, sex and period from the estimated date of onset to the date of diagnosis. In the secondary analysis, a multiple regression analysis was conducted to assess the association between fQRS and the organ involvement under the same conditions as above.

Results: In total, 45 participants were enrolled. The mean age was 42.3 years, and 37 (82%) were female. The median SLEDAI-2K was 14 [IQR, 10 to 20]. The median period from the estimated date of onset to the date of diagnosis was 3 months [IQR, 2 to 14.5]. 25 patients (56%) had fQRS. In the main analysis, the regression coefficients [95% CI] of fQRS for SLEDAI were 2.99 [ 1.15 to 4.84, p=0.002 ] with reference to non-fQRS. In the secondary analysis, there were no significant associations between fQRS and the blood test or the organ involvement.
Conclusions: Our results demonstrated that the frequency of fQRS on ECGs would be greater in SLE patients with high disease activity.

REFERENCES:

Disclosure of Interest: None declared

AB0604 INITIAL CLINICAL AND IMMUNOLOGICAL FACTORS ASSOCIATED WITH MANIFESTATIONS IN PATIENTS WITH PRIMARY SJÖGREN’S SYNDROME: A SINGLE CENTRE RETROSPECTIVE STUDY
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Background: Primary Sjögren’s syndrome (pSS) is a prototypic systemic autoimmune disease that manifests various signs and symptoms. Although a few studies have focused on these manifestations over the long term, the association of initial clinical and immunological factors with subsequent longer-term manifestations has not been fully elucidated.

Objectives: To identify initial clinical and immunological factors associated with manifestations in patients with pSS.

Methods: A retrospective review was performed on pSS patients followed over a 10 year period at our department. Clinical and immunological data, including levels of serum immunoglobulin (Ig) and autoantibodies, were collected and statistically analysed.

Results: A total of 224 patients diagnosed with pSS who had met the classification criteria were enrolled. Among them, 201 patients were diagnosed with pSS at our hospital. Of these, we followed the 91 patients who continued to visit our hospital over 10 years. Of the other 110 patients, 69 suddenly interrupted treatment, 20 visited different hospitals, and 13 interrupted treatment at our department and visited dentistry or ophthalmology departments. During observation, 7 patients were newly diagnosed with rheumatoid arthritis in addition to SS and one patient died. We then analysed the 91 patients who continued to visit. Of these, 88 were female and 3 were males. Average age was 52 years. 72 and 33 patients had anti-SS-A and anti-SS-B antibodies, respectively. 64 patients had neutropenia, anaemia and thrombocytopenia, respectively. 15% of patients used corticosteroid and/or immunosuppressant treatment. 10% of patients took traditional Chinese medicine. On follow-up for 10 years, titer of lgG, A and M were significantly decreased, whereas complement levels were elevated. The proportion of patients with extraglandular involvement decreased from 90% to 73%, whereas 14% of patients had new extraglandular organ involvement. The frequency of extraglandular involvement at 10 years was high in patients with hyper IgG at the initial test (39% vs 85%, p<0.01). The frequency of extraglandular organ involvement at 10 years was high in patients who were RF-positive at diagnosis (3% vs 15%, p<0.05). 9% of patients developed malignancies. 29% of patients without RF at diagnosis. Age, anti-centromere antibody, hyper IgG and anaemia were identified to be significant factors associated with malignancies. Extraglandular involvement was associated with the presence of hyper IgG (p<0.01), and extraglandular organ involvement was associated with RF positivity (p<0.05).

Conclusions: Our study newly identified initial clinical and immunological factors associated with manifestations in patients with pSS over a long period. pSS patients with RF and hyper IgG at diagnosis were candidates for the development of extraglandular involvement in the future.

REFERENCES:

Disclosure of Interest: None declared

AB0605 PROCALCITONIN MIGHT BE USED FOR DISCRIMINATING INFECTIONS FROM INCREASED DISEASE ACTIVITY IN PRIMARY SJÖGREN SYNDROME
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Background: Procalcitonin is a polypeptide which is secreted as a response to bacterial stimulus and accepted as an early and sensitive marker of infection. In healthy subjects procalcitonin should be <0.1 ng/mL. In case of infection it may rises over 0.5 ng/mL. Its level in inflammatory diseases usually does not reach to such high levels as in infections. Differentiating infection and disease activation may be confusing in autoimmune diseases. For this purpose, there were several studies that evaluated the role of procalcitonin for excluding infection on suspicion of increased autoimmune disease activity.

Objectives: As far as we know, there is no study in literature that evaluated procalcitonin levels in patients with primary Sjögren’s syndrome (pSS). Our aim is to evaluate procalcitonin levels in pSS and determine whether we can use it as a marker to differentiate infection from disease activation.

Methods: The following two groups of patients were included in the study: Forty-eight patients with pSS, who met ACR 2012 Classification Criteria for Sjögren’s Syndrome; and fifty-three subjects as control group who have no chronic diseases. Patients with possible infection were excluded according to their clinical evaluation and laboratory data. Then, serum procalcitonin levels were compared between the groups. Finally, we evaluated the correlation between disease activity, measured by Sjögren’s syndrome disease activity index (SSDAI) and procalcitonin levels.

Results: Procalcitonin levels in pSS group were found statistically higher than control group, whereas it was still in normal ranges (p<0.01). Furthermore, no correlation was found between disease activation and the procalcitonin levels (p=0.63). The observed differences were statistically significant.

Conclusions: Procalcitonin levels were found higher in pSS patients. But, none of the patients had clinically significant increase in procalcitonin. We thought that with careful clinical evaluation, procalcitonin would be an indicator for differentiating infection from disease activation in pSS patients.

REFERENCES:

Disclosure of Interest: None declared

Abstract AB0605 – Table 1. Demographic properties and Laboratory results of the subjects

<table>
<thead>
<tr>
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<th>Sjögren (n=48)</th>
<th>Control (n=53)</th>
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</tr>
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<tr>
<td>Gender(M/F)</td>
<td>3/45</td>
<td>2/51</td>
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<tr>
<td>Age</td>
<td>53.50 (48.50–58.75)</td>
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<tr>
<td>Sedimentation (mm)</td>
<td>22.00 (12.00–31.75)</td>
<td>18.00 (11.00–27.00)</td>
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<td>CRP (mg/dl)</td>
<td>3.27 (3.27–3.27)</td>
<td>3.27 (3.27–3.27)</td>
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<tr>
<td>SSSA score</td>
<td>1.00 (1.00–2.00)</td>
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<td>Procalcitonin(nmol)</td>
<td>0.036 (0.031–0.044)</td>
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<td>Creatinine (mg/dl)</td>
<td>12.50 (11.65–13.50)</td>
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<td>Thrombocyte(10^9)</td>
<td>231.00 (189.50–278.00)</td>
<td>265.00 (226.50–304.50)</td>
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<td>WBC (10^9)</td>
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<td>C-reactive protein (mg/dl)</td>
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<td>0.57 (0.52–0.62)</td>
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<td>ALT (U/L)</td>
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<tr>
<td>AST (U/L)</td>
<td>22.50 (19.00–25.00)</td>
<td>21.00 (17.50–25.50)</td>
<td>0.30</td>
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Statistically significant P values were shown bold. Numerical variables were summarised by median (interquartile range).