Conclusions: Our results demonstrated that the frequency of fQRS on ECGs would be greater in SLE patients with high disease activity.

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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 prototypical systemic autoimmune disease that manifests various signs and symptoms. Although a few studies have focused on these manifestations over the long term,^{1,2} 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 criteria³ 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 antibody and rheumatoid factor (RF). 82, 68 and 7 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, titers of IgG, 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 the initial test had RF during the 10 years observation. The presence of dry eyes or mouth findings did not change during follow-up in pSS patients.

We then created a multivariate model of predictors for malignancies, extraglandular involvement and extraglandular organ involvement with possible variables at diagnosis. Age, anti-centromere antibody, hyper IgG and anaemia were identified to be significant variables 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 involvements in the future.

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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.²

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 ($p=0.63$).

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

	Sjögren (n=48)	Control (n=53)	p
Gender(M/F)	3/45	2/51	0.66
Age	53,50 (48,50–58,75)	50,00 (43,50–55,00)	0.04
Sedimentation (mm)	22,00 (12,00–31,75)	18,00 (11,00–27,00)	0.13
CRP (mg/dl)	3,27 (3,27–3,27)	3,27 (3,16–3,27)	0,16
SSDAI score	1,00 (1,00–2,00)	N/A	
Procalcitonin(ng/ml)	0,036 (0,031–0,044)	0,020 (0,020–0,020)	<0,01
Haemoglobin (gr/dl)	12,50 (11,65–13,50)	12,80 (11,95–13,50)	0,82
Thrombocyte($10^3/uL$)	231,00 (189,50–278,00)	265,00 (226,5–304,50)	0,02
WBC (/uL)	6000,00 (5400,00–7200,00)	6700,00 (5450,00–8000,00)	0,15
Creatinine (mg/dl)	0,66 (0,59–0,76)	0,57 (0,52–0,62)	<0,01
ALT (U/L)	18,5 (13,25–25,00)	18,00 (13,50–25,00)	0,74
AST(U/L)	22,50 (19,00–25,00)	21,00 (17,50–25,50)	0,30

Statistically significant P values were shown bold. Numerical variables were summarised by median [interquartile range]

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.

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