

SAT0232

PERCEPTION OF THE DISEASE IN PATIENTS WITH EARLY SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus is an autoimmune disease with a major impact on patient's quality of life.

Objectives: To evaluate patient's attitude toward early disease and factors that influence it.

Methods: Performed case-control study included SLE patients that fulfilled SLICC, 2012 classification criteria. The research included two groups of patients: early SLE – 1st group (disease duration ≤24 months) and non-early SLE – 2nd group control (disease duration >24 months). The pattern of the disease activity was assessed by patient global assessment (PGA), Systemic Lupus Erythematosus Disease Activity Index 2000 (SLEDAI-2K) and Systemic Lupus Activity Measure (SLAM), for SLE activity, SLICC/ACR Damage Index (DI) for disease irreversible changes and SF-8 for the Quality of Life (QoL).

Results: A total of 101 SLE patients with 34 in the 1st group (early SLE) and 67 in the 2nd group (non-early SLE) was analyzed. The disease activity showed high disease activity in both groups by SLEDAI (7,02±4,16 and 6,26±4,43 points, p>0,05) and SLAM (7,47±4,40 and 7,31±4,10 points, p>0,05) such as (46,97±19,39 vs 47,98±22,41 points). The QoL was appreciated as low, by both components (mental and physical), in groups. The damage index was higher in the 2nd group (0,23±0,43 and 1,07±1,29, p<0,001), which can be explained by the development of irreversible changes with the increase of disease duration.

The PGA in early SLE was influenced by subjective symptoms contained in SLAM index (r=0,48, p<0,05), such as fatigue and depression, and the level of the quality of life (r=0,65, p<0,001). Meantime, PGA in patients with longer disease duration (>2 years), was influenced by the presence of organ damage by SLICC/ACR DI (0,23, p<0,05) and objective findings of the disease activity contained in SLEDAI (r=0,33, p<0,005) and SLAM (0,44, p<0,001).

Conclusion: The disease recognition in patients with early SLE was determined by subjective and psycho-emotional signs, while in patients with longer disease duration it was influenced by organ damage and complications.

References: no references

Disclosure of Interests: None declared

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SAT0233

CHARACTERISTICS OF PRIMARY SJÖGREN'S SYNDROME INCLUDING ULTRASOUND FINDINGS OF THE SALIVARY GLANDS, ESSDAI AND ESSPRI

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Background: Studies have shown that salivary gland ultrasonography (SGUS) may have a potential value in the diagnosis of Sjogren's Syndrome (SS).

Knowledge of the association between ultrasonography findings, disease activity and damage, serologic markers and patient report outcome is limited.

Objectives: To investigate whether the results of SGUS are associated with disease manifestations and damage measured by doctor-reported activity score index (ESSDAI) and serologic markers. Furthermore to investigate the contribution of patient reported outcome measure (ESSPRI) in disease monitoring.

Methods: Patients registered at Odense University Hospital with the diagnosis primary SS were included in a Danish cohort. The patients were characterized using the ESSDAI, ESSPRI, serologic markers and SGUS-findings in submandibular and parotid glands. Schirmer's test and salivary test were performed for measurement of tear and salivary production.

SGUS was performed using a linear transducer, Siemens (ACUSON Sequoia Ultrasound System) on the two parotid and two submandibular glands. SGUS images was scored according to the OMERACT SS severity scoring system from 0 to 3, where 2 is moderate and 3 severe(1). A reliability study was performed in advance of the present study.

Spearman's r correlation coefficient was used to assess correlation between scores.

Results: The cohort consisted of 48 Caucasian patients diagnosed with primary SS. Details on patient characteristics are shown in table 1.

Table 1.

Sex, n (%)	
Women	46 (95.8)
Age, mean (95%CI)	60 (57-62)
Smoking, n (%)	
Smoker	1 (2.1)
BMI, n (%)	
< 18.5	5 (10.4)
18.5 – 24.9	20 (41.7)
25.0 – 29.9	12 (25.0)
30.0 – 34.9	10 (20.8)
> 35.0	1 (2.1)
Serologic markers, n (%)	
SSa positive	33 (68.8)
SSb positive	22 (45.8)
ANA positive	38 (79.2)
Cryoglobulin positive	9 (18.8)
ESSPRI 0-10, mean (95%CI)	
Dryness	7.3 (6.7-7.9)
Fatigue	7.1 (6.4-7.7)
Pain	5.9 (5.1-6.7)
SGUS, n (%)	
Score 0	6 (12.5)
Score 1	15 (31.3)
Score 2	13 (27.1)
Score 3	14 (29.2)
ESSDAI, n (%)	
ESSDAI < 5 (low-activity)	22 (45.8)
≤ 5 ESSDAI ≤ 13 (moderate-activity)	17 (35.4)
≥ 14 (high-activity)	9 (18.8)

The correlation between ESSDAI-scores and SGUS-scores was $r = 0.153$ ($p = 0.299$). The correlation between ESSDAI-scores and ESSPRI-scores (dryness, fatigue, pain) was $r = 0.071$ ($p = 0.632$), $r = 0.254$ ($p = 0.082$) and $r = -0.002$ ($p = 0.987$). The correlation between SGUS-scores and ESSPRI-scores (dryness, fatigue, pain) was $r = 0.124$ ($p = 0.400$), $r = -0.292$ ($p = 0.044$) and $r = -0.459$ ($p = 0.001$).

Conclusion: In a Danish cohort of SS most patients had SSa and ANA autoantibodies. SGUS demonstrated high damage (score 2-3) in approximately half of the patients. ESSDAI activity score did not correlate with SGUS damage scores or the ESSPRI. SGUS damage scores correlated with ESSPRI-scores of fatigue and pain, but not dryness.

Associations between other factors of importance for damage and SGUS scores are to be analyzed. SGUS and the ESSPRI describe different SS-related dimensions and will probably contribute in disease monitoring in the future.

References:

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SAT0234

SERUM AXL, FERRITIN, IGFBP4 AND STNFR2 AS BIOMARKERS OF PEDIATRIC SLE

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Background: Proteomic screening is an efficient approach for identifying protein biomarkers in various inflammatory diseases. Our preliminary proteomic analysis revealed elevated levels of serum Axl, Ferritin, IGFBP4 and sTNFR2 in adult patients with active lupus nephritis (LN) (1). However, the role of these serum biomarkers in pediatric systemic lupus erythematosus (SLE) patients has not been examined.

Objectives: To evaluate the performance of 4 serum protein markers for detecting disease activity in pediatric patients with SLE.

Methods: 83 pediatric patients who fulfilled ≥4 ACR criteria for SLE and 25 healthy controls were recruited for serological testing of 4 protein markers identified by antibody-coated microarray screen, namely Axl, ferritin, IGFBP4 and sTNFR2. SLE disease activity was assessed using the SLEDAI-2k score, renal disease activity was assessed by the renal SLEDAI (range 0-16; 0= inactive LN, ≥ 8= active renal). 57 patients had clinically active SLE (SLEDAI score ≥ 4 or having a flare) (28 active renal and 29 active non-renal SLE patients). In active renal