

Results: There were 41 SLE patients integrated in the study, female:male ratio 9,25:1, mean age (SD) 39 (12.35) years (range 20–67 years), disease duration (SD) was 9.92 (9.18) month (range 1–24). The mean disease activity by SLEDAI was 11.2±7.84 (range 2–34) and SLAM – 8.83±4.41 (range 3–22) points, both indices denoted high disease activity level. Mean PGA values were 48.93 (19.13) (range 10–80), and mean MDGA values 45 (19.04) (range 10–80). Also, PGA and MDGA didn't correlate with SLEDAI ($r=0,25, p>0,05; r=0,27, p>0,05$), while a statistically significant correlation was determined with SLAM index ($r=0,85, p<0.001; r=0,46, p=0.002$). A subclass analysis of SLAM components showed that cortical dysfunction (depression, psychosis) and the presence of headache correlated with PGA ($r=0,36, p<0,05; r=0,4, p<0,05$), so we can establish that the difference in correlation between SLAM and SLEDAI with PGA and MDGA is explained by a more accurate disease assessment by SLAM, including also subjective complaints that influences the global patient's status.

Conclusions: The use of SLAM for disease activity assessment in early SLE patients is more sensible than SLEDAI and its results correlates with PGA and MDGA.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3710

SAT0297 SLE PATIENTS WITH SECONDARY SJÖGREN'S SYNDROME ARE CHARACTERIZED BY TYPICAL AUTOANTIBODIES AND A PRO-INFLAMMATORY STATE

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Background: Sjögren's syndrome occurs in isolation (primary Sjögren's syndrome, pSS), but it is also often secondary (sSS) to, and sometimes difficult to delineate from, other rheumatic diseases, in particular from systemic lupus erythematosus (SLE). Consequently there is a need to investigate similarities and differences between SLE patients with (SLE-sSS) and without sSS (SLE-noSS).

Objectives: To investigate the occurrence of sSS in a large cohort of SLE patients and to explore clinical and laboratory characteristics associated with SLE-sSS as compared to SLE-noSS and controls.

Methods: We included 504 consecutive SLE patients and 322 population controls, individually matched for age and gender to the first patients. All patients fulfilled the 1982 revised ACR criteria for SLE. SLE-sSS was defined according to the American-European consensus criteria (AEC). Accordingly, subjective and

Immunoglobulins, autoantibodies and pro-inflammatory cytokines in SLE-SS, SLE-noSS and population controls

	Controls N=322 median (IQR) or N(%)	SLE-SS N=117 median (IQR) or N(%)	SLE-noSS N=387 median (IQR) or N(%)	p-value SLE-SS vs. SLE-noSS
IgA total g/L	2.1 (1.5-2.8)	2.9 (1.8-4.3)	2.7 (1.9-3.6)	0.38
IgG total g/L	10.9 (9.5-12.2)	14.5 (10.4-18.3)	12.4 (9.8-15.8)	0.009
IgM total g/L	1.1 (0.8-1.6)	1.0 (0.5-1.6)	0.9 (0.6-1.5)	0.89
anti-dsDNA % positive (+)	5 (1.6)	36 (31.3)	15 (4.1)	0.06
anti-Ro52 % +	3 (0.9)	56 (47.9)	84 (21.8)	<0.0001
anti-Ro60 % +	5 (1.6)	69 (59)	137 (35.9)	<0.0001
anti-La/SSB % +	10 (3.1)	44 (37.6)	69 (18)	<0.0001
anti-Sm % +	1 (0.3)	19 (16.2)	75 (19.5)	0.42
anti-RNP 68 % +	0 (0)	11 (9.4)	40 (10.4)	0.74
Rf IgG % +	10/261 (3.8)	17/80 (21.2)	35/259 (13.5)	0.09
Rf IgM % +	14/283 (4.9)	32/83 (38.6)	56/281 (19.9)	0.0005
Rf IgA % +	12/282 (4.2)	34/74 (45.9)	75/267 (28.0)	0.004
TNF-α pg/mL	2.3 (2.0-2.8)	4.9 (3.6-7.1)	4.4 (3.0-6.0)	0.008
IL-6 pg/mL	0.5 (0.4-0.7)	1.5 (0.8-3.0)	1.1 (0.6-2.0)	0.009
MCP-4 pg/mL	55.8 (40.8-80.5)	94.9 (66.9-131.3)	74.7 (52.4-120.0)	0.019
MIP-1 β pg/mL	43.7 (33.4-56.4)	81.1 (54.8-123.6)	68.9 (50.3-105.1)	0.021
IL12/IL-23p40 pg/mL	131.2 (99.8-179.5)	211.3 (141.4-363.8)	177.1 (119.6-274.5)	0.032
IP-10 pg/mL	351.9 (259.2-476.4)	808 (536-1911)	726 (440-1471)	0.036

objective quantifications of sicca symptoms were recorded on all subjects. All underwent a thorough clinical investigation. SLE-associated autoantibodies, (ANA screening by BioPlex 2200 system, Bio-Rad) and Rheumatoid factor (RF, Phadia Immucap 250) were determined with standardized methods for all subjects, Routine laboratory workup and a panel of cytokines (MSD 30-plex cytokine assays, performed on samples from 433 consecutive SLE patients and 319 controls) were measured on fasting blood samples.

Results: SLE-sSS, as defined by AEC, occurred in 23% of the SLE patients. Compared to SLE-noSS the SLE-sSS group was older, both at inclusion (55 vs 43 yrs, $p<0.0001$) and at disease onset (40 vs. 32 yrs $p<0.0001$), and with a greater number of females (96 vs. 83%, $p=0.0007$), higher occurrence of leucopenia (57 vs. 45%, $p=0.02$) and peripheral neuropathy (15 vs 7%, $p=0.01$). Nephritis was less common in SLE-sSS (32 vs 43%, $p=0.03$). Higher levels of total IgG, positivity for anti-SSA/Ro52, anti-SSA/Ro60, anti-SSB antibodies, RF IgM and RF IgA further characterized the SLE-sSS group. 20/30 investigated cytokines were detectable, of these 19/20 were higher in SLE than in controls. 6/20 cytokines (TNF-α, IL-6, MCP-4, MIP-1β, IL12/IL-23p40 and IP-10) were upregulated in SLE-sSS vs. SLE-noSS (see table for figures).

Conclusions: Through strictly applying the AEC criteria we report that the frequency of SLE-sSS increases with age and affects roughly 1/4 of SLE patients. Nephritis was less common while leucopenia and peripheral neuropathy were more common among SLE-sSS patients. In addition to excess of well-known SS-associated autoantibodies we report higher levels of six pro-inflammatory cytokines in SLE-sSS as compared to SLE-noSS. These findings demonstrate that, though often regarded as a milder version of SLE, patients with SLE-sSS are characterized by a state of chronic systemic inflammation.

Acknowledgements: Susanna Eketjäll at Cardiovascular and Metabolic Diseases, Innovative Medicines and Early Development Biotech Unit, AstraZeneca, Integrated Cardio Metabolic Centre (ICMC), Karolinska Institutet, Huddinge, Sweden

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.5449

SAT0298 INFLUENCE OF AGE ONSET IN CLINICAL AND BIOLOGICAL SPECTRUM OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus (SLE) is a multi systemic auto immune disease which can affect patients at any age.

Objectives: We aimed to study influence of age onset in clinical and biological spectrum of SLE

Methods: medical records of 89 patients diagnosed as SLE according to the ACR criteria of 1997, between January 2004 and December 2016, were retrospectively analyzed. Patients were divided into 3 groups according to the age of onset: Juvenile onset patients (group 1) (G1) (≤ 16 years), Adult onset patients (group 2) (G2) (>16 and <50 years), Late onset patients (group 3) (G3) (≥ 50 years). Clinical and biological comparative study was conducted between the 3 groups. Data were analyzed by chi-square test and potentially associated factors were tested by binary logistic regression.

Results: among the patients 11.2% are in G1, 75.3% in G2 and 13.5% in G3. Prevalence of SLE was higher in female than male (F/M=9/1) but predominance of women was lower in G1 (F/M=4/1) compared to G2 (F/M=10/1) and G3 (F/M=11/1). Patients in G3 had more hypertension (41.7%) compared to G2 (6%) ($p=0.5$) and G1 (0%) ($p=0.04$). Vespetilio erythema was less frequently found in G3 (33.3%) compared to G2 (64.2%) ($p=0.045$) and G1 (80%) ($p=0.04$). Anti Sm antibodies were more frequent in G1 (87.5%) compared to G2 (38.5%) ($p=0.009$) and G3 (18.2%) ($p=0.003$). Multivariate analysis showed that hypertension is significantly associated to late onset lupus (OR=29, 95% IC= [2.77 – 320], $p=0.05$) and anti Sm antibody is more frequent in juvenile onset patients (OR=12, 95% IC= [1.4– 117], $p=0.024$).

Conclusions: according to our study, prevalence of lupus is higher in female regardless of age onset. Late onset lupus is associated to a high frequency of co morbidity while anti Sm antibody seems to be a hallmark of juvenile onset.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.3003

SAT0299 ATYPICAL ANTIBODIES IN PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

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Background: One of the main features of primary Sjögren's syndrome (pSS) is