antiphospholipid biology without APS, Prothrombin Time<50%, activated Partial Thromboplastin Time ratio >1.2, platelets<50 G/L and biopsied kidney size were not associated with a higher rate of complications.

The number of glomeruli sampled and the performance of the biopsy to establish a histologic diagnostic were similar in the 4 groups.

Conclusions: TJRB provides diagnostic yield and safety similar to those of TCRB. It should be considered as a first intention procedure for SLE and APS patients at risk of bleeding.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.1645

SAT0437

INITIAL MANIFESTATIONS OF CHILDHOOD-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS: RESULTS OF SINGLE CENTRE RETROSPECTIVE STUDY

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Background: Approximately 10%–20% of patients (pts) with SLE develop lupus before 18 years old. Childhood-onset SLE (cSLE) usually has more aggressive course. The achievement of medication-free remission in adulthood is extremely rare in cSLE and quality of life remains compromised.

Objectives: To establish the specific features of cSLE at disease onset by the retrospective study in single centre.

Methods: 216 pts with cSLE who were hospitalised in our centre from 1992 to 2017 were included in retrospective study. Diagnosis of SLE was reviewed according to 2012 SLICC criteria. Clinical, haematological and immunological manifestations of SLE were evaluated. SLEDAI 2K was used for disease activity assessment.

Results: 12.9% of cSLE pts were boys (girls to boys ratio was 6.7:1). The triggering factor was found in 29% pts: solar exposure – in 51%, previous infection – in 19%, stressful situation – in 12%, vaccination – in 10%, menarche – in 5%, high physical activity – in 3%. Only 9.2% of patients initially had SLE diagnosis, 1.4% had discoid lupus erythematosus as an initial diagnosis, 21% – different infections, 11.2% – allergic diseases, 6.3% – nephritis, 33.6% – various rheumatic diseases (16.8% – juvenile idiopathic arthritis), in remaining 17.3% cases the information about initial diagnosis was missing. The median age at the onset was 13.7 y (10.8; 15.05); the median disease duration at the time of cSLE verification was 6 months.²; 14 In 33.4% pts cSLE was verified after 1 year disease duration, in 15.3% – after 3 years. The most common feature was arthritis – in 71.4%. Fever observed in 68.5% pts at the onset, significant weight loss – in 29.4%. 64% pts had acute cutaneous lupus at the onset, 42.4% – chronic cutaneous lupus, 17.7% – oral and nasal ulcers, 22.2% – nonscarring alopecia, 31% – serositis, 56.6% – renal involvement, 21.2% – neuropsychiatric disorder. The Coombs' positive hemolytic anaemia was found in 15.8% pts, leucopenia/lymphopenia – in 52.2%, thrombocytopenia – in 23.6%. ANA were detected in 100% pts, anti-dsDNA – in 83.3%, anti-Sm – in 29.2%, antiphospholipid antibodies – in 7.3%, hypocomplementemia – in 49.0%, positive direct Coombs test out of hemolytic anaemia – in 13.5%. Macrophage activation syndrome at the onset was documented in 3.4% pts. Median disease activity by SLEDAI at the time of cSLE verification was 13.7 scores,^{8,20} maximum – 42.

Conclusions: cSLE presentation with non-specific general and constitutional manifestations in the majority of cases misled to erroneous interpretation of the condition as infectious or allergic disease in 1/3 of all cases. A monosymptomatic manifestation at the onset, such as arthritis, skin lesion or hematologic disorders, can lead to late diagnosis and very high activity at the moment of start therapy. Specific features of cSLE must be suspected in all cases of arthritis with skin lesions and/or any haematological manifestations, even non-specific.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3683

SAT0438

INCREASED RISK OF DEPRESSION IN PATIENTS WITH CUTANEOUS LUPUS ERYTHEMATOSUS AND SYSTEMIC LUPUS ERYTHEMATOSUS: A DANISH NATIONWIDE COHORT STUDY

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Background: Quality of life is considerably impaired in patients with systemic lupus erythematosus (SLE) as well as in patients with cutaneous lupus erythematosus (CLE). In patients with SLE, prevalence estimates of depression ranges considerably,¹ while the prevalence of depression in CLE remains severely understudied. Data on the actual risk of depression in adults after being diagnosed with CLE or SLE remain scarce.

Objectives: To examine whether patients with SLE or CLE have increased risk of depression.

Methods: In this nationwide observational cohort study, we included patients ≥18 years with a first-time diagnosis of SLE or CLE between 2000–2015 identified in the Danish National Patient Register matched with people from the general population in Denmark in a 1:10 ratio. After linkage to various national Danish health registers analyses of risk for depression and antidepressant use were performed in Cox regression models adjusted for age, sex, socio-economic status, smoking, alcohol abuse, prior depression, and prior antidepressant use.

Results: A total of 3489 patients with lupus erythematosus and 34 890 people from the general population were included. The adjusted hazard ratios (HRs) of depression were 1.87 (95% CI, 1.37–2.55) and 2.15 (95% CI, 1.66–2.77) for patients with CLE and SLE, respectively, compared to the general population. The adjusted HRs of antidepressant use were 1.36 (95% CI 1.22–1.51) and 1.76 (95% CI 1.62–1.91) for patients with CLE and SLE, respectively. The risk of depression was more pronounced in patients diagnosed <50 years of age; adjusted HR=2.88 (95% CI, 1.77–4.69) for CLE and HR=2.33 (95% CI, 1.56–3.49) for SLE. Also a high risk of depression was observed for men with CLE (HR 2.59, 95% CI, 1.24–5.42) and SLE (HR 2.23, 95% CI, 1.11–4.48). Neither CLE or SLE were associated with increased risk of death from suicide.

Abstract SAT0438 – Table 1. Crude and adjusted hazard ratios for depression and antidepressant use in patients with lupus erythematosus compared with the general population

	Crude HR	(95% CI)	P-value	Adjusted HR*	(95% CI)	P-value
Depression						
CLE	2.34	(1.71–3.18)	<0.0001	1.87	(1.37–2.55)	0.0001
SLE	2.33	(1.81–3.01)	<0.0001	2.15	(1.66–2.77)	<0.0001
Antidepressant use						
CLE	1.61	(1.45–1.79)	<0.0001	1.36	(1.22–1.51)	<0.0001
SLE	1.94	(1.78–2.10)	<0.0001	1.76	(1.62–1.91)	<0.0001

* Adjusted for age, sex, smoking, alcohol abuse, socio-economic status, prior depression, and prior antidepressant use.

CI, confidence interval; CLE, cutaneous lupus erythematosus; HR, Hazard Ratio; SLE, systemic lupus erythematosus.

Conclusions: The risk of depression was significantly increased in patients with SLE or CLE. We recommend that rheumatologists and dermatologists are aware of the increased risk of depression in patients with SLE or CLE.

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Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.2874

SAT0439

DIFFERENTIAL LEVELS OF NOVEL AND CLASSIC ANTIPHOSPHOLIPID ANTIBODIES AMONG PATIENTS WITH PRIMARY ANTIPHOSPHOLIPID SYNDROME AND SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: High levels of antiphospholipid antibodies (aPL) are associated predominantly with a higher risk of thrombosis, however, information about differential levels according underlying diagnosis is less well known.

Objectives: Our aim was to compared serum levels of 2 novel aPL (anti-phosphatidylserine/prothrombin (PS/PT) antibodies and anti domain 1 against β2 glycoprotein I (anti-D1 B2GP1)) and "classic" (anticardiolipin, aCL and anti B2GP1 antibodies) among patients with primary APS, SLE with and without thrombosis

Methods: In this cross-sectional study, Anti-D1 B2GP1 antibodies were tested using a chemiluminescent immunoassay (QUANTA Flash, Inova Diagnostics). In

addition, anti PS/PT (IgG and IgM), aCL (IgG and IgM) and anti B2GP1 (IgG and IgM) were measured at the same time by ELISA techniques (QUANTA Lite, Inova Diagnostics). Lupus anticoagulant was detected according to the guidelines of the International Society on Thrombosis and Haemostasis. Differences in mean values between groups were analysed with the Mann-Whitney U test for comparison of 2 groups

Results: One hundred and seventy three patients were included, 87% of patients were female with a mean age of 33 ± 12 years. 150 patients had SLE and 23 patients primary APS. Fifty five (31%) out of 177 had history of thrombosis and 41 (23%) of pregnancy losses. Levels of IgM aCL, IgM B2GP1, IgM Anti PS/PT and total antibodies against Anti-D1 B2GP1 were significantly higher in patients with primary APS than in patients with SLE and thrombosis (see figure 1). IgG anti PS/PT (75.9 ± 91.3 vs 27.4 ± 39.3 IU, $p < 0.001$) and total anti-D1 B2GP1 (65.2 ± 152 vs 16.4 ± 65.1 IU, $p < 0.001$) were significantly higher in patients with SLE with thrombosis than in patients with SLE without thrombosis. Obstetric morbidity (66.7% vs 21.7%, $p = 0.016$) and *livedo reticularis* (22% vs 0%, $p > 0.07$) were more common in patients with primary APS than SLE with thrombosis. No significant differences were found in terms of thrombotic events among both groups

Abstract SAT0439 – Figure 1. aPL levels according diagnosis (IgM for aCL, anti B2GP1 and anti PS/PT and total antibodies against Anti-D1 B2GP1)

Conclusions: Patients with primary APS have significant higher serum levels of anti PS/PT and anti-D1 B2GP1 antibodies and “classic” aPL (aCL and anti B2GP1) antibodies than patients with SLE with thrombosis. Whether if these titers are useful to differentiate patients with primary and secondary APS requires further analysis in prospective studies.

Acknowledgements: Anti D1- B2GP1 antibodies were provided by Inova, Werfen, Colombia

Disclosure of Interest: J. A. Gómez-Puerta Speakers bureau: Werfen/Inova, T. Urrego: None declared, A. Hernández: None declared, S. Ruiz: None declared, S. M. Osorno: None declared, C. Rua: None declared, J. Duque Botero: None declared, A. Vanegas-García: None declared, C. H. Muñoz: None declared, L. A. González: None declared, G. Vásquez: None declared
DOI: 10.1136/annrheumdis-2018-eular.4588

SAT0440 PHENOTYPIC FEATURES AND PREDICTORS OF THE CLINICAL SEVERITY OF KERATOCONJUNCTIVITIS SICCA AND SALIVARY GLAND DYSFUNCTION IN PATIENTS WITH SJÖGREN'S SYNDROME: A LONGITUDINAL ANALYSIS OF THE KISS COHORT

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Background: Hyposecretion of tears and saliva is the main phenotype of primary Sjögren's syndrome (PSS). However, the prevalence and degree of ocular and oral involvement in PSS is highly variable.

Objectives: The aims of this study were 1) to investigate oral and ocular signs and changes in primary SS patients, and 2) to explore possible predisposing factors for moderate to severe oral or ocular signs in primary SS.

Methods: We analysed 140 participants from the Korean Initiative of PSS cohort who completed a two-year follow-up oral and ocular sign test. The severity of keratoconjunctivitis sicca (KCS) was determined by the Schirmer I test (Moderate-to-severe [MS], ≤ 5 mm/5 min; mild [Mi], > 5 mm/5 min). Salivary gland dysfunction (SGD) was determined by unstimulated whole salivary flow rate (UWS) (MS, UWS < 0.1 ml/min; Mi ≥ 0.1 ml/min). Subgroups were divided into three groups according to the severity of KCS and SGD: MS-KCS/MS-SGD, MS-KCS/Mi-SGD, and Mi-KCS/MS-SGD group. We analysed the severity of changes in KCS and SGD during the follow-up period.

Results: Among the 140 participants enrolled in this study, 108 (61%) were placed in the MS-KCS/MS-SGD group, 17 (24%) were in the MS-KCS/Mi-SGD, 15 (16%) were in the Mi-KCS/MS-SGD at the two-year follow-up. The MS-KCS/Mi-SGD group was younger than the other two groups, had a lower xerostomia inventory, and lower level of $\beta 2$ microglobulin. Participants in the Mi-KCS/MS-SGD group had less hyperimmunoglobulinemia, rheumatoid factor (RF), antinuclear antibodies, anti-Ro, and anti-La antibodies. Older patients and those with positive RF, anti-Ro, or anti-La antibodies at baseline were more likely to have moderate to severe KCS at the two-year follow-up.

Conclusions: Patients with PSS and positive RF, anti-Ro, or anti-La antibodies at baseline may benefit from regular ophthalmology exams, even if they do not have KCS at baseline or dry eye symptoms.

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Acknowledgements: We wish to thank So Young Kim, the research nurse for the KISS cohort, for her excellent support.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2018-eular.3615