Pulmonary uptake was observed in 6 (40%) patients with lymphoma and 6 (20%) without lymphoma ($p=0.17$). But in lymphoma patients, this uptake was focal in 5 (33.3%) patients (nodules or condensation) and in only one (3.3%) patient without lymphoma ($p=0.01$). Remaining patients had interstitial FDG uptake. Mean PET score (4^{2-3} vs. 2^{1-3} $p=0.04$) and SUVmax at any site (6.3 [5.6–7.3] vs. 4.2 [3.7–5.9] $p=0.02$) were significantly higher in lymphoma group. 20 patients had PET guided biopsy of a hypermetabolic lesion that conducted to lymphoma diagnosis in 7 cases (46.6%). After chemotherapy for lymphoma, PET was available for 10 patients: complete regression of hypermetabolic lesions was observed in 6 patients (60%), and decreased uptake intensity in the 4 remaining patients.

Conclusions: Some of the systemic manifestation of pSS (lung, lymph nodes and salivary glands) can be assessed by 18F-FDG PET. Lymph nodes hypermetabolism is frequent and not associated with lymphoma. The 18F-FDG PET abnormalities associated with lymphoma diagnosis are SUV max at any site >6 , SUV max of parotid glands >5 and focal nodular hypermetabolic lung lesions. Finally, PET can be helpful to guide biopsy toward the most hypermetabolic structure for diagnosing lymphoma.

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THU0359 RELATIONSHIP BETWEEN DAMAGE CLUSTERING AND MORTALITY IN JUVENILE SYSTEMIC LUPUS ERYTHEMATOSUS: CLUSTER ANALYSES IN A LARGE COHORT FROM THE SPANISH SOCIETY OF RHEUMATOLOGY LUPUS REGISTRY

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Objectives: Identify patterns (clusters) of damage manifestations within a large cohort of patients with juvenile-onset SLE (jSLE) and evaluate their potential association with mortality.

Methods: Multicenter, descriptive and cross-sectional study of a cohort of 345 patients with jSLE (age at SLE diagnosis <18 years) from the Lupus Registry of the Spanish Society of Rheumatology (RELESSER). Organ damage was determined by using the SLICC/ACR damage index (SDI). By using cluster analysis, groups of patients with similar patterns of damage manifestations were identified and compared among them.

Results: Mean age (years) $\pm$ S.D. at diagnosis was 14.2 ± 2.89 , 88.7% were female and 93.4% were Caucasian. Mean SLICC/ACR DI $\pm$ S.D. was 1.27 ± 1.63 . A total of 12 (3.5%) patients died. Three damage clusters were identified: Cluster 1 (72.7% of patients) presented a lower amount of individuals with damage (22.3% vs 100% in clusters 2 and 3, $p<0.001$). Cluster 2 (14.5% of patients) was featured by renal damage in 60% of patients, significantly more frequent than clusters 1 and 3 ($p<0.001$), alongside more ocular, cardiovascular and gonadal damage. Cluster 3 (12.7%) was the only group with musculoskeletal damage (100%), significantly higher than in clusters 1 and 2 ($p<0.001$). The overall mortality rate in cluster 2 was 2.2 times higher than that in cluster 3 and 5 times higher than that in cluster 1 ($p<0.017$ for both comparisons).

Conclusions: In a large cohort of jSLE patients, renal and musculoskeletal damage manifestations were the two dominant forms of damage to sort patients into clinically meaningful clusters. We found two clusters of jSLE with important clinical damage that were associated to higher rates of mortality, especially for the cluster of patients with predominant renal damage. Physicians should pay special attention to the early prevention of damage in this particular subset of jSLE patients with kidney involvement.

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THU0360

A VALIDATION STUDY OF THE GLOBAL ANTIPHOSPHOLIPID SYNDROME SCORE (GAPSS) IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND PREGNANCY MORBIDITY

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Background: Systemic lupus erythematosus (SLE) and antiphospholipid antibodies (aPL) are associated with pregnancy complications.

Objectives: To validate the global antiphospholipid syndrome score (GAPSS) in a cohort of women with SLE.

Methods: 143 women ever pregnant with SLE who presented in our outpatient clinic were included (table 1). Data on cardiovascular risk factors and aPL positivity were retrospectively collected. The individual GAPSS was calculated for each patient by calculating the sum of each risk factor score, which is based on a linear transformation derived from the β regression coefficient as follows: 3 for hyperlipidaemia, 1 for arterial hypertension, 5 for aCL IgG/IgM, 4 for anti-b2 glycoprotein I IgG/IgM, 3 for aPS/PT IgG/M and 4 for lupus anticoagulant (LA) ¹.

Results: Significantly higher GAPSS values were seen in patients with a history of pregnancy complications compared to those without a history pregnancy complications. Results are outlined in table 1 and figure 1.

Abstract THU0360 – Table 1. Patient demographics

Patients Characteristics	All (n=143)	%
Age, mean (S.D.), years	43.6 (SD 10.8)	
Disease duration, mean (S.D.), years	13.4 (9.3)	
Ethnicity (White:Black:afro-carib:Columbian: Asian)	119:6:11:1:4	
Cardiovascular risk factor (any), n	84	58%
Smoking, n	39	27%
Arterial Hypertension	44	31%
Hyperlipidemia, n	31	22%
Diabetes, n	4	3%
Pregnancies, n	382	
Pregnancy morbidity (any), n	54	14%
Consecutive early miscarriages (>3), n	9	2%
Any miscarriage, n	39	10%
Fetal death, n	25	7%
Prematurity, n	15	4%
Pre-eclampsia, n	19	5%
Intrauterine death, n	10	3%
Placental infarction, n	5	1%

Abstract THU0360 – Figure 1. Graphic illustration of the global antiphospholipid syndrome scores (GAPSS) in women with and without pregnancy morbidity.