Conclusion: The prevalence of neurodevelopmental abnormalities in children born to mothers with SLE or APS seems to be higher than normal population and more educational attention is important in these children, and need long-term follow-up.

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THU0269

CLINICAL COMPARISON OF NEW CRITERIA FOR SYSTEMIC LUPUS ERYTHEMATOSUS IN A COLOMBIAN COHORT

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Background: Due to heterogeneity of the disease, there has been several classification criteria for Systemic Lupus Erythematosus (SLE). These have considered the knowledge obtained through the years and have strived for increased sensibility and specificity. Recently, both EULAR and ACR have proposed new criteria for disease classification that mandate a positive ANA result to apply the criteria.

Objectives: To compare the 2019 EULAR/ACR classification criteria (1) with the Systemic Lupus International Collaborating Clinics (SLICC) 2012 classification criteria (2) and the American College of Rheumatology (ACR) 1997 classification criteria in a Colombian cohort (3).

Methods: A cross-section retrospective study was done with data collected between 2014 and 2018 from a population diagnosed with SLE by a group of rheumatology in an autoimmunity referral centre and followed for one year. The new 2019 EULAR/ACR classification criteria were applied to the information collected from the clinical records. Three sets of criteria were compared using Cohen's kappa coefficient and concordance was evaluated

Results: We obtained information for 480 patients, in this analysis were mostly females (96%). Anti-nuclear antibody (ANA) results were available for 95% of the patients. According to SLICC classification criteria the diagnosis of SLE was definite in 92% of patients, 81% by ACR 1997 and 89% using ACR/EULAR 2019. The sensibility was 93% and 97% for ACR/EULAR 2019 and SLICC 2012, and the specificity was 67% and 48% respectively. The concordance analysis between the two sets of criteria showed agreement of 92% (kappa 0.52 p<0.001) in the whole group.

Conclusion: We found good agreement between SLICC 2012 criteria and EULAR/ACR 2019 classification criteria. In contrast with previous studies, where the new criteria had a sensitivity of 96.1% and specificity of 93.4%, in our cohort the sensitivity was maintained in 93% but the specificity decreased to 67%. A possible explanation could be the ANA negativity that was seen in 5% of the patients and would force to discard patients with false negative results. Despite this, the agreement of the criteria is good and should continue to be applied in our population, without abandoning the expert's clinical criteria.

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THU0270

ONLINE INTERACTION AND FREQUENT SELF-ASSESSMENTS PROMOTED TREAT-TO-TARGET FOR SLE VIA EMPOWERING PATIENTS: A COHORT STUDY FROM CHINA BY SMART SYSTEM OF DISEASE MANAGEMENT (SSDM)

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Background: Treating to target (T2T) is routine in RA, but no comparable standard has been defined for SLE. In 2015, the definition of Lupus Low Disease Activity State (LLDAS) was generated by Asia-Pacific Lupus Collaboration, and the preliminary validation demonstrated its attainment to be associated with improved outcomes in SLE. A SLEDAI-2K score lower than 4 is the main criteria for LLDAS. SSDM is an interactive mobile disease management application, including application systems for both the doctors and patients.

Objectives: To evaluate the patterns of T2T and related influential factors among SLE patients after applying SSDM in real world.

Methods: Patients were trained to master SSDM by healthcare professionals in clinics. The first assessment for SLEDAI-2K was performed as the baseline. Patients were required to perform repeated self-assessments after leaving the clinics. The data is synchronized to the SSDM of authorized rheumatologists. Based on the patients' data, rheumatologists will provide medical advices to the patients.

Results: From July 2015 to Jan 2020, 32,559 SLE patients enrolled in SSDM. The mean age is 36.35 years old and median disease duration is 3.85 years. Among them 1,937 SLE patients from 134 hospitals across China were followed up for more than 12 months, and the demographics were summarized in table 1.

Table 1.

Baseline/Final follow-up	n	%	x <= 4	%	5 <= x <= 9	%	10 <= x <= 14	%	15 <= x	%
x <= 4	1040	53.69%	820	78.85%	135	12.98%	50	4.81%	35	3.37%
5 <= x <= 9	357	18.43%	230	64.43%	60	16.81%	32	8.96%	35	9.80%
10 <= x <= 14	222	11.46%	120	54.05%	38	17.12%	40	18.02%	24	10.81%
15 <= x	318	16.42%	156	49.06%	49	15.41%	47	14.78%	66	20.75%
Total	1937	100%	1326	68.46%	282	14.56%	169	8.72%	160	8.26%

The ratio of T2T achievers was 53.69% (1,040/1,937) at the baseline and improved significantly to 68.46% (1,326/1,937) after a 12-month follow-up, p<0.01. Among T2T achievers at the baseline, 78.85% (820/1,040) maintained T2T, and 21.15% (220/1,040) relapsed. Of patients who didn't achieve T2T at baseline, 56.41% (506/897) of the patients achieve T2T after 12-month follow-up.

The impact of the online interaction and the frequency of self-assessment for SLEDAI-2K on T2T has been analyzed. Compared with 1,475 patients who didn't interact online with their physicians through SSDM, 462 patients with online interaction achieved higher rate of T2T improvement (19.48% vs 13.29%, p<0.05). The more frequent of the self-assessments being performed by patients, the higher improvement of T2T rate will be. The improvement rates of T2T in the subgroups which self-assessed with SSDM by quarterly, bimonthly and monthly were 8.56%, 16.14% and 23.24% respectively. The improvement rate (y) of T2T was positively correlated with the frequency of self-assessment for SLEDAI-2K(x) independently, r = 0.9998. (Figure 1)

Conclusion: After proactive disease management via SSDM for more than 12 months, the rate of T2T in SLE patients increased significantly. Online interaction between patients and physicians contributed in promoting T2T improvement rate. The patients who performed more self-assessments through SSDM had higher probability of T2T achievement. SSDM is a valuable tool for long term SLE follow-up through empowering patients.

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THU0271

PERFORMANCE OF THE EULAR/ACR 2019 CLASSIFICATION CRITERIA FOR SYSTEMIC LUPUS ERYTHEMATOSUS IN EARLY DISEASE, ACROSS SEXES AND ETHNICITIES

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Background: EULAR/ACR 2019 SLE Classification Criteria were validated in an international cohort.

Objectives: To evaluate performance characteristics of SLE classification systems in sex, race/ethnicity, and disease duration subsets.

Methods: Sensitivity and specificity of the EULAR/ACR 2019, SLICC 2012 and ACR 1982/1997 criteria were evaluated in the validation cohort.

Results: The cohort consisted of female (n=1098), male (n=172), Asian (n=118), Black (n=68), Hispanic (n=124) and White (n=941) patients; and patients with an SLE duration of 1-3 years (n=196), 3-5 years (n=157), and ≥5 years (n=879). Among patients with 1-3 years disease duration, the EULAR/ACR criteria had better sensitivity than the ACR criteria (97% (95%CI 92-99%) vs 81% (95%CI 72-88%). The new criteria performed well in men (sensitivity 93%, specificity 96%) and women (sensitivity 97%, specificity 94%). The new criteria had better sensitivity than the ACR criteria in White (95% vs 83%), Hispanic (100% vs 86%) and Asian patients (97% vs 77%).

Conclusion: The EULAR/ACR 2019 criteria perform well in patients with early disease, and across sexes and ethnicities.

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THU0272

BASEMENT MEMBRANE SEROLOGICAL MARKERS OF COLLAGEN TYPE IV AND LAMININ REMODELING ARE DIFFERENTIALLY EXPRESSED IN SLE

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