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POS0763

PERFORMANCE OF THE NEW ACR/EULAR 2019 CLASSIFICATION CRITERIA FOR SYSTEMIC LUPUS ERYTHEMATOSUS (SLE) IN A COHORT OF ARGENTINIAN PATIENTS

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Background: In 2019 ACR and EULAR published in joint collaboration the new classification criteria for Systemic Lupus Erythematosus (SLE). Compared to the previous ones, these criteria have shown higher sensitivity and specificity in multiple cohorts. To our knowledge, its performance has not been evaluated in a cohort of patients with rheumatological diseases living in Argentina.

Objectives: The aim of this study was to evaluate the sensitivity and specificity of the ACR/ EULAR 2019 criteria in a cohort of patients with connective tissue diseases residing in Argentina. Secondary objectives were to determine the Likelihood Ratio (LR) of these criteria and the correlation of their global score with activity and damage indexes of the disease.

Methods: Multicentre, retrospective and analytical study. Patients ≥ 18 years old with diagnosis of SLE (ACR 1997/SLICC 2012) without other associated collagen diseases (case group), and patients with other non-SLE connective tissue diseases (control group) were included. Those with active infectious disease, oncohematological disease, drug-induced lupus and overlap syndrome were excluded. Sociodemographic data, characteristics of the disease and treatment were recorded. In addition, activity and damage indexes were recorded in the group with SLE.

Three SLE experts, blinded to the diagnosis determined, for every individual if the patient had SLE or another rheumatological disease. An interrater agreement of 100% (including the 3 evaluators) was considered "defined SLE" and used as gold standard. In all cases, ACR 1997/SLICC 2012/ACR / EULAR 2019 criteria were applied and compared with the gold standard. Statistical analysis: Descriptive statistics was estimated. Sensitivity, specificity, positive and negative LR of the criteria were determined. The association between the final score of the ACR-EULAR 2019 criteria and the disease activity and damage indexes were estimated with Spearman correlation test. STATA 15.0 was used for data analysis.

Results: A total of 365 patients from 7 centres in Argentina were included. A One hundred and eighty-three belonged to the SLE group: 92.3% women, mean age 39 years (SD 13.3), median disease duration 92 months (IQR 37-150). The most frequent manifestations of the disease were mucocutaneous (94%), musculoskeletal (82.5%) and haematological (69%). All patients presented ANA +, 88% hypocomplementemia, 69.4% Anti-DNA and 19.5% antiphospholipid antibodies. Median SLEDAI and SLICC were 2 (IQR 0-6) and 0 (IQR 0-1), respectively. In the control group, 182 patients were recruited: 84% women, mean age 53.6 years (SD 14.2) and median disease duration 82.5 months (IQR 38-151). The most frequent diseases were Rheumatoid Arthritis (46.1%), Scleroderma (18.1%) and Sjögren's Syndrome (16.5%) and most common manifestations were musculoskeletal (81.9%), immunological (73.6%) and constitutional (25.3%). A total of 62.6% of patients presented ANA+, 8.6% hypocomplementemia, and 1.3% Antiphospholipid antibodies.

Ninety-one percent of patients in the case group were classified as defined SLE and 3.8% in the control group.

The ACR / EULAR 2019 Criteria showed a 99.4% sensitivity and an 89.1% specificity, with a LR+ of 9.1 and a LR- of 0.007. The sensitivity and specificity of SLICC 2012 criteria were 98.3% and 88%, respectively with a LR+ of 8.2 and a LR- of 0.02; and the ACR 1997 criteria showed a 93.96% sensitivity and 90.1% specificity, with LR + of 8.21 and LR - of 0.07.

The correlations between the ACR/EULAR 2019 Criteria global score, and activity and damage indexes were 0.19 and -0.006, respectively.

Conclusion: The new ACR / EULAR 2019 criteria have shown high sensitivity, a specificity comparable to its predecessors, and a higher ability to distinguish SLE from other diseases and to exclude it in non-SLE patients. No correlation was observed between the criteria scores and activity and damage indexes.

REFERENCES:

[1] Aringer M, Costenbader K, Daikh D, et al 2019 EULAR/ACR classification criteria for SLE. *Ann Rheum* 2019; 78: 1151-1159.

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EULAR RECOMMENDATION-BASED QUALITY INDICATORS (QIS) FOR SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): ELABORATION, FINAL SET, PERFORMANCE AND INITIAL VALIDATION

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Background: Targets of therapy and quality of care are receiving increased attention in systemic lupus erythematosus (SLE).

Objectives: To develop Quality Indicators (QIs) for the care of SLE patients based on the EULAR recommendations, and assess their performance.

Methods: Using the published EULAR recommendations for SLE, we developed 44 candidate QIs. These were independently rated for validity and feasibility by 12 experts, analysed by a modified RAND/UCLA model and further scrutinized based on the scorings and expert opinion. (Fig.1) Adherence to the final set of QIs was tested in a cohort of 220 SLE patients combined with an assessment on its impact on disease outcomes such as flares, hospitalizations and organ damage.

Results: The panel rated 18 QIs as valid and feasible. These involve diagnosis; disease and damage assessment; monitoring for lupus nephritis and drug toxicity; therapy and targets of therapy; fertility and pregnancy; and adjunct therapy (preventive measures for osteoporosis, vaccination, cardiovascular disease). On average, SLE patients received 54% (95%CI 52–56%) of the indicated care with adherence ranging from 41% for QIs related to monitoring to 88% for treatment-related QIs. Regarding targets of therapy, sustained remission or low disease activity were achieved in 27%, while 94% of patients received low-dose glucocorticoids, and 92% the recommended hydroxychloroquine dose. Dependent upon individual QI tested, adherence for lupus nephritis-related QIs was 88% for receiving appropriate adjunct therapy (ACE inhibitors) to 100% for being treated with the indicated immunosuppressive treatment. In contrast, adherence to QIs related to preventive measures and other adjunct therapies was moderate to low. Notably, patients who were eligible for cardiovascular risk modification, vaccination, and osteoporosis management received lower quality of care (40.5%, 47.7% and 45.5% respectively) while 91.4% had sunscreen protection. In reference to laboratory work-up and monitoring, complete laboratory work-up at diagnosis was performed in 48%, while disease activity and damage, were fully assessed only in 14.1% (in three consecutive visits) and 28.6% (annually) respectively. Similarly, reproductive health and pregnancy counselling adherence rates were modest estimated at 50% and 62% respectively. Higher adherence to the indicated care during follow-up (monitoring QIs) was associated with reduced risk for adverse outcomes during the last year of observation (OR 0.97, 95%CI 0.96-0.99). Patients who achieved sustained remission or LLDAS, exhibited fewer flares (OR=0.15, p-value<0.001) and damage accrual (OR=0.35, p-value<0.001). Of interest, patients who received low-dose of GCs or were appropriately vaccinated, had a lower risk of experiencing a flare (OR=0.23 and 0.46 respectively).