six main PROs: body pain, patient global and fatigue score on a 0-10 visual analogue scale, as well as a functional impact score, self-report joint count and symptom checklist which have a range of 0-10, 0-48 and 0-60 respectively. Composite indices consisting of either two or three of patient pain score 6, self-report joint count 16 and symptom checklist 16 or three or four of the same measures plus a fatigue score have been described previously to provide clues to comorbid FM in other rheumatic diseases [3,4]. Individual PROs and these composite indices were compared between patients with and without FM by student’s unpaired t-test and Area Under the Curve (AUC) analysis. The physician’s diagnosis of FM was assessed against the FM criteria using Cohen’s kappa. Physicians were blinded to the results of the 2016 FM criteria.

Results: 88 patients with SLE were studied, of whom 23 (26%) satisfied FM criteria. Those with FM reported higher scores in all PROs. A patient global of 6 could correctly classify 90% of patients and provided the highest AUC of 0.95, followed by the symptom checklist and body pain. An index of three measures (pain score, self-report joint count and symptom checklist) gave an AUC of 0.90. An index of four measures (additional fatigue criterion) gave an AUC of 0.93. Both indices correctly classified 89% of patients with a cut-off of 2 and 3 respectively. The physician’s diagnoses had moderate agreement with the FM criteria (kappa = 0.43).

Conclusion: Comorbid FM is prevalent in SLE yet often missed by physicians. In busy clinical settings, composite indices provide useful clues to coexisting FM in SLE, although a simple MDHAQ patient global is quick and potentially just as valuable in this patient group. These findings require further validation in a larger cohort.

REFERENCES:

Disclosure of Interests: Frank Huang; None declared, Sean O’Neill; None declared, Ray Fang; None declared, Matthew Nguyen; None declared, Kathryn Gibson Grant/research support from: UCB, Abbvie, Speakers bureau: UCB, Janssen


THU0267 THE SLE DISEASE ACTIVITY SCORE (SLE-DAS) ENABLES ACCURATE DEFINITIONS OF SLE REMISSION AND LDA AS ACHIEVABLE TARGETS IN DISEASE MANAGEMENT

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Background: The treat-to-target strategy in Systemic Lupus Erythematosus (SLE) aims to achieve remission. However, to define a target based on the SLE Disease Activity Index (SLEDAI) is questionable, due to its limitations (especially its dichotomous nature). The SLE Disease Activity Score (SLE-DAS) is a recently validated continuous disease activity score which has a higher accuracy in measuring SLE activity and a higher sensitivity-to-change compared to SLEDAI.1

Objectives: To assess the ability of SLE-DAS to define SLE remission and other disease activity states.

Methods: Cross-sectional study of SLE patients fulfilling the ACR’97 and/or SLICC’12 classification criteria and followed at the Padua Lupus Clinic from March to June 2018. At each outpatient visit, the attending clinician scored SLE disease activity (in the last 30 days) using Physician Global
Assessment (PGA) (0-3 points, 10 cm scale), SLEDAI-2K and SLE-DAS. A senior rheumatologist expert in SLE, blinded to the disease activity scores, classified each patient in 1 of 4 categories: (i) remission, (ii) low disease activity (LDA), (iii) mild disease activity and (iv) moderate/severe disease activity. The best cut-off values of SLE-DAS to define these categories were estimated using Receiver Operating Characteristic (ROC) curve analysis. Accuracy, precision, sensitivity and specificity values for these cut-off values were then calculated. The agreement between the SLE-DAS and physician’s classification was measured using Kappa coefficient. Statistical significance was set at 0.05.

Results: We included 221 patients (84.2% female, mean age of 45.4±13.5 years, mean disease duration of 15.4±9.5 years). In this preliminary study, the proposed cut-off values of SLE-DAS to define each disease activity category were: remission SLE-DAS≤2.08, LDA 2.08<SLE-DAS≤3.77, mild disease activity 3.77<SLE-DAS≤7.64, and moderate/severe disease activity SLE-DAS>7.64 for (Table 1). The overall accuracy of these SLE-DAS cut-off values to identify each disease activity state was 96.4%. The agreement between SLE-DAS and physician’s classification was very high (k=0.925, p<0.001). Distribution of SLE-DAS and SLEDAI-2K scores in each disease activity state is presented in Figure 1. According to the SLE-DAS cut-offs, 68.8% of the patients were in remission, 2.3% in LDA, 10.9% in mild disease activity and 18.1% in moderate/severe disease activity.

Abstract THU0267 – Table 1. Performance of SLE-DAS to assess each disease activity state.

<table>
<thead>
<tr>
<th>Disease Activity State</th>
<th>Sensitivity (%)</th>
<th>Specificity (%)</th>
<th>Precision (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remission</td>
<td>99.3</td>
<td>97.1</td>
<td>98.7</td>
</tr>
<tr>
<td>LDA (SLE-DAS≤2.08)</td>
<td>66.7</td>
<td>99.5</td>
<td>80</td>
</tr>
<tr>
<td>Mild Disease Activity</td>
<td>88.0</td>
<td>99.0</td>
<td>91.7</td>
</tr>
<tr>
<td>Moderate/Severe Disease Activity (SLE-DAS&gt;7.64)</td>
<td>94.9</td>
<td>98.4</td>
<td>92.5</td>
</tr>
</tbody>
</table>

Conclusion: The SLE-DAS has a high precision in identifying remission, LDA, and other disease activity states in SLE. These results suggest that the SLE-DAS is an accurate tool in defining achievable targets in SLE management.

Figure 1. SLE-DAS and SLEDAI-2K scores for each disease activity state according to the physician’s classification. The accuracy of SLE-DAS in separate the disease activity levels calculated by the linear regression of these scores, according to the scoring of the SLEDAI-2K hospital.

Abstract THU0267 – Figure 1

REFERENCES:


THU0268

CLINICAL AND LABORATORY FEATURES OF PRIMARY SJÖGREN’S SYNDROME ASSOCIATED WITH ANTICENTROMERE ANTIBODIES

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Background: The prevalence of ACA among patients with pSS varies from 2% to 27%. Among experts, there is a lot of controversy about whether primary Sjögren’s syndrome with ACA is a separate disease subtype or overlap-syndrome with systemic sclerosis.

Objectives: To evaluate clinical and laboratory features of ant centromere antibody-positive (ACA) primary Sjögren’s syndrome (pSS); to evaluate the spectrum of autoantibodies in patients of this group; to evaluate conformity of the patients to the pSS and systemic sclerosis (SSc) classification criteria; to evaluate prevalence of salivary MALT-lymphoma in this group of patients; to evaluate prevalence of primary biliary cirrhosis (PBC)/biliary lesions in this group of patients.

Methods: From 2012 to 2018, we examined 83 patients with pSS and ACA. Inclusion criteria were conformity to the 2001 Russian Sjögren’s syndrome criteria and high ACA titer. We used ACR 2012 and ACR/EULAR 2016 criteria to evaluate conformity to the pSS, and ACR 2013 criteria to evaluate conformity to the SSc. Diagnosis of salivary MALT lymphoma was established on the basis of histological, immunohistochemical and PCR studies of biopsy specimens of parotid salivary glands. Diagnosis of PBC/biliary lesions was made on the basis of histological and immunohistochemical studies of liver biopsy specimens.

Results: We found a low detection rate of anti-Ro antibodies (32.5%), anti-La antibodies (7.2%), RF (21.7%), increased ESR (14%), leucopenia (7%), hypergammaglobulinemia (17.6%), increased IgG (9.5%), increased IgA (18.7%) hypocomplementemia (16.1%) in the group of patients with pSS and ACA. Despite the low frequency of detection of the RF, saline and immunohistochemical studies of liver biopsy specimens.

Conclusion: pSS associated with ACA is a subtype of the disease, significantly different from the “classic” in a number of clinical and laboratory signs and characterized by an increased risk of SSc and PBC/biliary lesions which in some cases leads to the underdiagnosis of pSS. ACA should be considered as pathogenetically related to pSS antibodies and all ACA-positive patients should be examined for pSS and PBC/biliary lesions regardless of whether they have SSc or not. Patients with a significant enlargement of salivary glands should be biopsied to confirm the presence of MALT-lymphoma before initiating hormonal, antilymphoproliferative and anti-B-cell therapy.

Disclosure of Interests: None declared

THU0269

SERUM IL-6 AND CIRCULATING IMMUNE COMPLEXES AS BIOMARKERS OF DISEASE ACTIVITY IN MULTICULTURAL ASIAN SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: IL-6 plays an important role in B cell hyperactivity and immunopathology of systemic lupus erythematosus (SLE), and may have a direct role in mediating tissue damage [1]. Elevated levels of serum...