AB0511

A COMPARATIVE STUDY ON CLINICAL AND SEROLOGICAL CHARACTERISTICS BETWEEN PATIENTS WITH RHUPUS AND PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Concomitant presence of two autoimmune diseases, such as rheumatoid arthritis (RA) and systemic lupus erythematosus (SLE) is known as "Rhumus". Although polyautoimmunity is not uncommon phenomenon, only a small series of patients have been described so far with Rhupus.

Objectives: Our purpose was to analyze the clinical and serological characteristics of patients with Rhupus and compare them with a cohort of patients with SLE.

Methods: In this cross-sectional study, we included cases of Rhupus (ACR/EULAR 2010 plus ACR 1987 criteria) from 11 different Rheumatology Departments at Catalonia, Spain. We included patients with a diagnosis of SLE in a 2:1 ratio matched by sex, race and disease duration. To avoid misclassification, those patients with Rhupus but who had Jacoud's arthropathy or with overlap syndromes were excluded.

Results: A total of 120 patients were included, 40 cases with Rhupus and 80 cases with SLE. Most of patients were female (95%) and Caucasian (75%). Mean age was 51.0 ± 14.7 years with a mean disease duration of 12.9 ± 9.2 years. Main clinical characteristics were articular involvement (93.3%), cutaneous involvement (77.5%), haematological (72.5%), secondary Sjögren syndrome (38.7%) among others. Clinical and serological characteristics according different groups are shown in Table.

	Total N=120	Rhupus n =40	SLE n = 80
Gender (Female),%	114 (95%)	38 (95%)	76 (95%)
Mean age, years ± SD	51,0 ± 14,7	57,10 ± 14,1 [§]	47,9 ± 14,2
Disease duration, years ± SD	12,9 ± 9,2	13,6 ± 7,9	12,6 ± 9,8
Race (Caucasian),%	84 (75%)	25 (78,1%)	59 (73,8%)
Clinical characteristics			
Cutaneous involvement, %	93 (77,5%)	31 (77,5%)	62 (77,5%)
Articular involvement, %	112 (93,3%)	40 (100%) [§]	72 (90,0%)
• Arthritis, %	96 (80,0%)	40 (100%) ^{§§}	56 (70,0%)
• Erosive disease, %	25 (20,8%)	24 (60,0%) ^{§§}	1 (1,3%)
• Tenosynovitis, %	37 (30,8%)	22 (55,0%) ^{§§}	15 (18,8%)
Renal involvement, %	24 (10%)	4 (10,0%) [§]	20 (25,0%)
Mean SLEDAI *	2,9 ± 2,8	2,6 ± 2,5	3,0 ± 3,0
Immunological features			
Positive RF, %	37 (32,7%)	32 (80%) ^{§§}	6 (6,8%)
Positive anti-CCP, %	33 (30,6%)	31 (81,6%) ^{§§}	2 (2,9%)
Comorbidity *	44 (36,7%)	20 (50,0%) [§]	24 (30,0%)
SLICC *	0,8 ± 1,36	1,3 ± 1,55 ^{§§}	0,6 ± 1,2
Treatment (ever)			
Prednisolone, %	100 (84,7%)	39 (97,5%) ^{§§}	61 (78,2%)
Antimalarial	109 (91,6%)	35 (89,7%)	74 (92,5%)
MTX	58 (48,7%)	33 (82,5%) ^{§§}	25 (31,6%)
Rituximab, %	24 (20,2%)	13 (33,3%) [§]	11 (13,8%)

* Last visit, * Comorbidities included: Hypertension, DM, dyslipemia, osteoporosis or Cushing.

Conclusion: We found some clinical and serological differences among patients with Rhupus vs SLE alone. As expected, articular domains and positive RF and ACPAs were higher in Rhupus. By other hand, renal involvement was more common among "pure" SLE patients. Rhupus patients were more commonly treated with prednisolone, MTX and rituximab, and had more comorbidities and organ damage. If Rhupus represent a different condition, requires further analysis in bigger cohorts.

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ANTI-CARBAMYLATED PROTEIN ANTIBODIES IN SYSTEMIC LUPUS ERYTHEMATOSUS: ARE THEY USEFUL?

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Background: Anti-carbamylated protein antibodies (anti-CarP) have been described not only in Rheumatoid arthritis but in other systemic autoimmune diseases. Recently, they have been reported in different cohorts of Systemic Lupus Erythematosus (SLE) with a prevalence of 9-28% (1-4). Anti-CarP have been proposed as a marker of erosive arthritis in SLE(4).

Objectives: The aim of this work was to assess the prevalence of anti-CarP in SLE patients from a single center cohort and their association to clinical and laboratory data.

Methods: Anti-CarP were evaluated using a home-made ELISA (5), with some modifications: all the incubations has been reduced to 1.5 hrs at room temperature and the reaction was developed with diethanolamine and read at 405nm. The cut-off value of 0.350 optical density (OD) was set up, testing 230 healthy controls sera, calculating the average plus 3 times standard deviation. The ROC curve analysis demonstrated a specificity and sensitivity of 0.98 and 0.32, respectively. The OD was converted to arbitrary units (AU) with 20 AU as cut-off value. Clinical data were obtained from clinical charts.

Results: Anti-CarP antibodies were found in 80/282 (28,3%) SLE patients. Complete clinical and serological data were available for 217 patients (76,9%): 71 positive and 146 negative. No clinical associations were found with anti-CarP antibodies. However, cytopenia and renal involvement were more frequently assessed in patients without anti-CarP antibodies (p: 0,019; OR 0,49; 95%CI 0,26-0,91 and p: 0,07, respectively). Among the patients evaluated, 56 were treated with anti-Bly therapy (belimumab). In this subgroup, sera collected at the first administration (T0), after 6 months (T6) and after 12 months (T12) were tested. At baseline anti-CarP were positive in 10 (17,8%) with a mean titre of 37 AU (SD: 17,9). AntiCarP titre significantly decreased at T6 (p: 0.006) and T12 (p: 0.01). Negative seroconversion was observed in 7/10 sera.

Conclusion: the prevalence of anti-CarP antibodies found in our cohort is in line with to what previously reported. In our hands, anti-CarP antibodies are not associated to any clinical SLE features.

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