FRI0234

FACTORS ASSOCIATED WITH THE DEVELOPMENT OF NEOPLASIA IN PRIMARY SJÖGREN'S SYNDROME

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Background: Primary Sjögren's syndrome (pSS) is characterized by lymphocytic infiltration of the exocrine glands. These patients have a higher risk than the general population of developing non-Hodgkin lymphoma (NHL). This risk also increases with the time of evolution of the disease. pSS is also associated with the development of non-hematological cancer such as thyroid, digestive or gynecological among others.

Objectives: The aim of the study is to explore the association between the development of neoplasia and demographic, clinical or therapeutic factors in pSS.

Methods: The SJOGRENSER registry is a multicenter, cross-sectional study of patients with pSS who meet the American-European consensus criteria of 2002, of 33 Spanish rheumatology units. The demographic, clinical, analytical, therapeutic and neoplastic data were collected through review of the clinical records and interviews with the patients. Previously, all the patients signed informed consent and the approval of the local ethic committees was obtained. Descriptive statistics was used for the analysis of the data. The chi-squared test was used to establish the statistical associations and it was considered a $p < 0.05$ as significant. Bivariate logistic regression models were used to identify the effect of each independent variable on the main variable (neoplasia); the multivariate analysis was used to establish the independent effect of the patient characteristics associated with the dependent variable.

Results: Four hundred and thirty-seven patients were included in SJOGRENSER Registry (female gender 95.19%; median age 58.3 years). We found 30 patients (6.86%) with neoplasia (3 of them with more than one neoplasia): 7 with lymphomas (23.3%) (4 MALT lymphomas, 2 Hodgkin's lymphomas, 1 immunocytoma), 9 with gynecological neoplasia (30%), 2 with digestive malignancies, 2 with hematological, 2 with endocrine, 6 with malignancies in other locations, 3 with multiple myeloma and 2 patients with Waldenstrom macroglobulinemia. The results of the bivariate analysis are shown in the table. The factors significantly associated with the development of neoplasia were older age, glandular inflammatory involvement, lung involvement and use of rituximab. The age at diagnosis of the disease tended to be higher in the group with neoplasia (50.1 ($\pm$ 12.9) vs 54.7 ($\pm$ 11.7), $p = 0.059$). In the multivariate analysis, positive associations were found for the development of neoplasia in older patients (OR 1.045; CI95% 1.010-1.081), patients with glandular inflammation (OR 3.104; CI95% 1.396-6.906), and use of rituximab (OR 3.745; CI95% 1.386-10.118).

Variable	Neoplasia -	Neoplasia +	p
Age (years)	58.3	63.6	0.023
Glandular inflammation (%)	31	53.3	0.012
Lung involvement (%)	8.9	23.3	0.010
Rituximab (%)	6	23.3	<0.001

Conclusion: Thirty (6.86%) patients with pSS from the SJOGRENSER registry developed some neoplasia; the most frequent was gynecological, followed by lymphoproliferative processes. Older age, glandular inflammatory involvement and use of rituximab (presumably indication bias) were associated with the presence of neoplasia.

REFERENCES:

- [1] Brito-Zeron, et al. Characterization and risk estimate of cancer in patients with primary Sjögren syndrome. *Journal of hematology & oncology* 2017;10:90.
- [2] Liang Y, et al. Primary Sjögren syndrome and malignance risk: a systematic review and meta-analysis. *Ann Rheum Dis* 2014;73:1151

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FRI0235

DIFFERENCES BETWEEN MALE AND FEMALE PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A SINGLE CENTER EXPERIENCE OVER 20 YEARS OF FOLLOW-UP

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Background: Systemic lupus erythematosus (SLE) is a chronic inflammatory disease of unknown etiology involving multiple organ systems. It affects predominantly women, and according to different reports only 4–22% of the lupus population is male. Sex differences may influence the clinical and serological expression, therapy and outcome, but the current results varies among different countries and different ethnic groups (1-3). Less is known about the clinical course of male SLE during the follow-up due to the small number of cases collected, but male sex might be a poor factor in SLE prognosis (4-9).

Objectives: The aim of this work was to analyze our male and female SLE patients with an ongoing follow-up.

Methods: Cumulative clinical, serological manifestations, concomitant diseases of patients belonging to the historical SLE cohort with at least one evaluation in the past 15 months were collected from clinical charts. For these patients data regarding the overall and ongoing treatments, damage index (SDI), activity index (SLEDAI-2K) during the last 12 months were collected. For statistical analysis was used Chi-squared test, Fisher exact test, Student T test or Wilcoxon-Mann Whitney when appropriated.

Results: Out of the 550 SLE patients registered until may 2018 we have included for this analysis 345 patients with an active follow-up, 31 males and 314 females, with a male to female ratio of 1:10. A higher number of SLE male had disease onset (13% vs 1.6%) and diagnosis (16% vs 1.6%) after 60 years compared to female ($p=0.001$; OR 9.1; 95%CI 1.92-42.56 and $p<0.0001$; OR11.8; 95% CI 2.73-51.56 respectively). The most relevant differences among male and female patients are reported in the table 1. Males more frequently presented discoid lesions, renal involvement, polyneuropathy and leukopenia compared to female SLE. No difference regarding disease activity during the last 12 months measured by SLEDAI was found. Regarding the damage index, males showed a higher mean SDI and number of patients with a severe damage (SDI>2) compared with women. Analyzing treatment prescribed since the diagnosis of SLE we collected some relevant differences: antimalarials were less prescribed in males than females (87%vs 97%, $p=0.02$; OR 0.19; 95%CI 0.051–0.825), whereas mycophenolate mofetil was more frequently used in males (63%vs36%, $p=0.005$ OR 3.0 95% CI1.3- 6.8). Finally, significant differences regarding the ongoing treatment are reported in table 1: mycophenolate mophetile was more frequently prescribed in males (84,2 vs 25,6) and a highly suggestive trend of significance toward a greater use of steroids in males was also found.

	SLE male N=31 (%)	SLE female N=314 (%)	P value
Clinical and serological manifestation			
Age at the onset (mean $\pm$ SD)	36.2 $\pm$ 15	29 $\pm$ 11.3	<0.001
Age at the diagnosis (mean $\pm$ SD)	39.13 $\pm$ 13.8	30.5 $\pm$ 11.4	<0.001
Discoid lesion	8 (25.8)	36 (11.5)	0.01, OR=3.25, 95%CI 1.236-8.610
Renal involvement	18 (58.1)	116 (36.9)	0.035, OR 2.36, 95%CI 1.055-5.33
Neurological involvement	13 (41.9)	48 (15.3)	0.001, OR 4.8, 95%CI 1.718-13.260
Polyneuropathy	5 (16.1)	7 (4.6)	<0.001, OR 4.43, 95%CI 1.13-32.52
Leukopenia	12 (38.7)	60 (34.5)	0.02, OR 2.67, 95%CI 1.14-6.17
Damage			
SDI (mean $\pm$ SD)	1.94 ($\pm$ 1.53)	1.26 ($\pm$ 1.55)	0.018
Number of patients with SDI=1	24 (77.4)	168 (53.2)	0.01
Number of patients with SDI>2	10 (32.3)	42 (13.3)	0.011, OR 3.08, 95%CI 1.25-7.48
Ongoing treatment			
Steroids	27 (87.1)	238 (75.8)	0.37
Mycophenolate mofetil	16 (51.6)	43 (13.7)	<0.0001, OR 6.72, 95%CI 2.90-15.62

Conclusion: Our study confirmed the presence of differences between male and female SLE patients, both on clinical manifestations and also during the disease course. Our results on currently followed male SLE confirmed that these patients have a more severe disease, in particular with renal or neurological manifestations, that could justify the higher use of mycophenolate mofetil and the higher SDI compared to female SLE.

REFERENCES:

- [1] S.P. Ballou, et al. *Arthritis Rheum.* 25 (1) (1982) 55–60.