THE WEAKER SEX: CHARACTERIZATION OF GENDER DISPARITIES IN A NATIONWIDE LUPUS REGISTRY

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Introduction and Methods

Systemic lupus erythematosus (SLE) is characterized by female predominance with male to female ratio around 1:10. Differences regarding clinical manifestations, disease activity, damage and mortality between men and women with SLE have been reported. Overall it is recognized that gender may affect SLE phenotype, but results concerning disease severity and prognosis are still a matter of debate.

Objectives: Characterization of Portuguese SLE male patients, focusing demographic, clinical, and laboratorial features.

Methods: All SLE patients from the Portuguese Lupus Register, Reuma.pt/LES were included. Demographic, clinical and therapeutic data were analyzed upon records from the last visit. Student t-tests, chi-square tests and Fisher's exact tests were used to compare male and female patients. Analyses were further adjusted to age and disease duration.

Results

Of the 1510 SLE patients registered in Reuma.pt/LES, 122 (8%) are men.

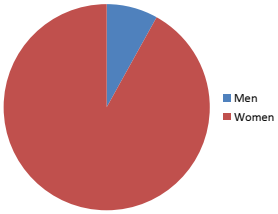

Figure 1 – Gender distribuition .

Male patients had later onset (39.4±20.6y vs 35.6±14.1y; p=0.005**)** and shorter disease duration (10.7±7.6y vs 14.1±9.0 y; p=0.0001**)**.

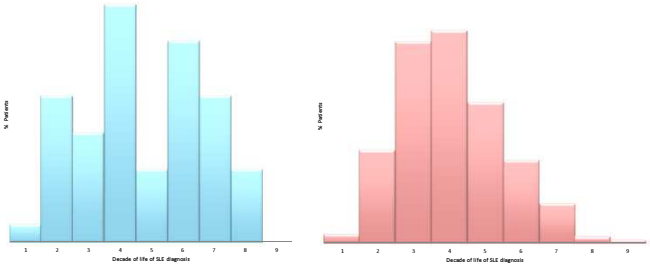

Figure 2 – Age at diagnosis in both genders. A heterogeneous distribution of age of diagnosis can be observed between the two genders. In women, there is clear predominance of diagnosis in the third and fourth decade of life. In men, a higher proportion of diagnosis are made in 2nd decade of life and in the elderly (6th to 8th decade of life).

- Serositis, renal involvement and hemolytic anemia were more prevalent in men while, photosensitivity, alopecia, oral ulcers and arthritis were more commonly found in women (Table 1).
- Accumulated damage assessed by the SLICC damage index (SDI) and disease activity, assessed by SLEDAI-2K at last visit were similar in the two groups, with adjustment to age and disease duration.

	Men (n=122)	Women (n=1389)	*P*
Photosensitivity	36 (32.4)	620 (49.9)	**<0.001***
Alopecia	7 (6.7)	310 (26.8)	**<0.001***
Oral ulcers	20 (17.7)	395 (31.9)	**0.008***
Arthritis	65 (57.0)	906 (72.5)	**<0.001***
Serositis	36 (32.1)	236 (18.9)	**0.001***
Renal Involvement	49 (44.1)	344 (28.1)	**<0.001***
Neurologic disorder	6 (5.4)	59 (4.8)	0.448
Hemolytic anemia	18 (16.4)	122 (9.8)	**0.031***
Anti-dsDNA positivity	96 (84.96)	929 (74.7)	**0.020**
Anti-SSA positivity	15 (27.8)	688 (39.1)	**0.064**
SLEDAI-2K	2.3±3.0	2.6±3.1	0.650
SLICC	0.82±1.3	0.71±1.22	0.126

Table 1 - Characteristics of SLE in male and female patients; (*) statistically significant differences, adjusted to age and disease duration

- Comorbidities in both genders are described in Table 2.

Hypertension, n=641	**12(27.9)**	**190 (31.8)**	**0.598**
Diabetes, n=641	4 (9.3)	9 (7.0)	0.576
Thyroid disease n=641	1 (2.3)	68 (11.4)	**0.041***
APS, n=641	1 (2.3)	48 (8.0)	0.140
Sjögren syndrome n= 641	2 (4.7)	66 (11.0)	0.142

Table 2 - Comorbidities in male and female patients; (*) statistically significant differences.

- Antimalarial drugs and steroids were used more frequently in women. The use of other imunosssupressants/modulators didn't show a statistical imbalance.

Discussion

Male patients with SLE are older at disease onset and present a distinct phenotype with less cutaneous, mucous membranes and articular manifestations. However, disease outcome evaluated by the SDI is comparable in men and women, which is in line with observations from other European cohorts.

The acknowledgement of the effect of gender on disease manifestations may help physicians in the timely introduction of an appropriate care.

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