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AB0589

CANCER PREVALENCE IN SYSTEMIC LUPUS ERYTHEMATOSUS: A PORTUGUESE COHORT STUDY WITH 15 YEARS OF FOLLOW-UP

Keywords: Systemic lupus erythematosus, Malignancy, Epidemiology

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Background: An increased risk of malignancy was reported in patients with Systemic Lupus Erythematosus (SLE) [1-3].

Objectives: To estimate the prevalence of cancer in a Portuguese cohort of patients with SLE over long term follow-up.

Methods: Patients followed up between 01/01/2006 and 31/10/2021 at the Centro Universitário de Coimbra Lupus Clinic were included. All patients fulfilling SLE classification criteria (EULAR/ACR 2019 or SLICC 2012 or ACR 1999) and assessed at least in two visits were included. Cancer cases were only considered if the diagnosis was established after SLE diagnosis. Patient and SLE clinical and treatment data were collect from the cohort electronic database. Disease activity was assessed with the SLE Disease Activity Score (SLE-DAS) and organ damage with the SLICC/ACR Damage Index (SDI). Associations with malignancy were tested using the *Chi-square test*, *Fisher exact test*, *Student's t-test*, or *Mann-Whitney U test*, as appropriate. Statistical significance with Bonferroni adjustment accounting for multiple comparisons was considered for $p < 0.005$

Results: In total, 438 patients were included (mean age: 49.6 ± 15.8 years-old; female: 85.4%; mean disease duration: 14.2 ± 9.8 years). At the last study visit, 68.8% were in remission, and mean SLE-DAS was 1.9 ± 2.5 . The total cumulative prevalence for cancer was 7.1% ($n=31$), with 4 patients presenting metastatic disease at the time of cancer diagnosis. The most common malignancies were non-melanoma skin cancer (1.1%), colorectal (1.1%), hematologic (1.1%), lung (0.7%), and breast cancer (0.7%). Cancer patients were older (64.5 ± 14.9 vs. 48.5 years, $p < 0.001$) and had higher any-cause mortality (35.5% vs. 5.9%, $p < 0.001$). There were no significant differences regarding disease activity at last visit, disease duration, organ damage or cumulative immunosuppressive therapy usage (38.7% vs 54%, $p=0.099$). Death as a direct result of malignancy occurred in 8 (72.7%) patients, accounting for 22.9% of death in our cohort.

Conclusion: This is the first study reporting cancer prevalence in a Portuguese SLE cohort. Our results are similar to those reported by Sultan et al (5.4%) (2), but substantially lower than those reported in a Finnish cohort (22%) (3).

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CROSS-SECTIONAL ASSESSMENT OF THE QUALITY OF LIFE IN SLE PATIENTS: ROLE OF DISEASE ACTIVITY, CHRONIC DAMAGE, FIBROMYALGIA SYNDROME AND MOOD DISORDERS

Keywords: Quality of life, Patient reported outcomes, Systemic lupus erythematosus

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Background: Systemic Lupus Erythematosus (SLE) is an autoimmune disease characterized by a wide spectrum of manifestations, potentially involving every system. This heterogeneity may influence different aspects of patients' daily life, including physical ability, working and social life, thus impacting the quality of life

(QoL). Among all the SLE-related manifestations, cutaneous involvement may lead to insecurity and isolation, negatively resulting in QoL.

Objectives: The aim of the present study was to analyse the QoL in a SLE cohort, determining the potential influence of disease activity, chronic damage, comorbidities, and mood disorders.

Methods: We enrolled consecutive SLE patients, diagnosed according to 2019 ACR/EULAR criteria. Clinical and laboratory data were collected, and disease activity and chronic damage were assessed by SLEDAI-2k and SDI. As controls, we enrolled patients affected by Discoid Lupus Erythematosus (DLE) and Undifferentiated Connective Tissue Disease (UCTD). The fibromyalgia diagnosis was made according to the 2016 ACR Classification Criteria. Quality of life was evaluated by using the Lupus Quality of Life questionnaire (LupusQoL); furthermore, each patient filled out the Hospital Anxiety and Depression Scale (HADS) questionnaire.

Results: We enrolled 237 SLE patients (M/F 18/219; median age 46 years [IQR 19.5], median disease duration 156 months [IQR 180]), 24 CLE patients (M/F 5/19; median age 61.5 years [IQR 29.5], median disease duration 92.1 months, [IQR 128.5]), and 25 UCTD (M/F 1/24; median age 40 years, [IQR 21.25]; median disease duration 66 months [QR 103.9]). In SLE patients the median SLEDAI-2k value was 0 (IQR 2) and the SDI was 0 (IQR 1). Fibromyalgia was diagnosed in 69 SLE patients (29.1%), 5 CLE (20.8%), and 7 UCTD (28%). The comparison among these three groups of patients revealed for SLE and CLE patients a significantly lower mean values in the LupusQoL domain related to Body Image (BI) (73.9 ± 27.7 and 71.3 ± 30.9 , respectively) compared to UCTD patients (87.2 ± 19.0) [$p=0.01$ and $p=0.03$, respectively]. Focusing on SLE patients, females showed significantly lower mean values compared to males for almost all domains: Pain (P, [$p=0.02$]), Intimate Relationship (IR; [$p=0.001$]), Burden to Others (BtO [$p=0.029$]), Emotional Health (EH; [$p=0.012$]), Body Image (BI; [$p=0.033$]) and Fatigue (F; [$p=0.002$]). As expected, fibromyalgia patients had lower values in all the domains of the LupusQoL when compared to patients without this condition ($p < 0.001$ for all comparisons, except for BI $p=0.006$). Moreover, as reported in Figure 1, SDI values negatively correlated with all the LupusQoL domains (Figure 1A); conversely, we found a positive correlation between SDI and both HADS domains (Anxiety [$r=-0.16$; $p=0.015$]; Depression [$r=-0.21$; $p=0.0009$]). As expected, a strong negative correlation was identified between LupusQoL score in each domain and both Anxiety [(BH $r=-0.58$, P $p=-0.53$, Planning $p=-0.52$, IR $p=-0.62$, EH= -0.75 , BI= -0.52 , F= -0.64 , BtO $r=-0.62$]; $p < 0.0001$ for all the analysis] and Depression [(BH $r=-0.61$, P $p=-0.58$, Planning $p=-0.63$, IR $p=-0.61$, EH= -0.55 , BI= -0.60 , F= -0.69 , BtO $r=-0.55$]; $p < 0.0001$ for all the analysis).

Conclusion: The presented results confirmed the negative impact of SLE on the quality of life. Among the analyzed variables, female sex and fibromyalgia deeply influenced the outcome. The chronic damage showed to be one of the main determinants of impairment of the QoL in SLE patients and of the development of Anxiety and Depression, measured through the HADS questionnaire. Lastly, Anxiety and Depression may contribute to the worst QoL in SLE, underlying the need for comprehensive evaluation and management of the SLE-associated comorbidities.

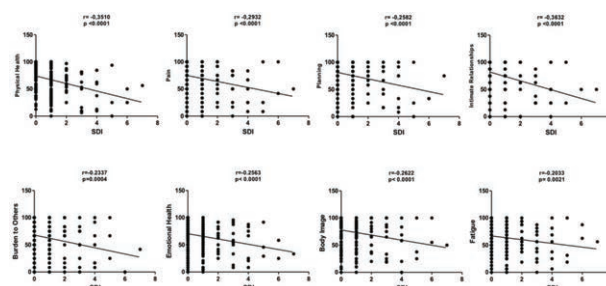


Figure 1. Correlations between HADS and LupusQoL domains

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COVID-19 VACCINE SAFETY DURING PREGNANCY IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS

Keywords: COVID, Pregnancy and reproduction, Systemic lupus erythematosus

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