THU0252

HORMONE DEPENDENCE AND CANCER IN SYSTEMIC LUPUS ERYTHEMATOSUS

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Objectives: To estimate the incidence of cancer in systemic lupus erythematosus (SLE) patients and to analyze factors associated with cancer differentiating between hormone-sensitive (HS) and non-HS cancers.

Methods: Multicenter retrospective study of a cohort of patients included in Spanish Society of Rheumatology Lupus Registry (RELESSER). The first cancer after the diagnosis of SLE, sociodemographic, clinical, activity, cumulative damage, severity, comorbidity, treatments, and refractory disease data were collected. Cancers were classified into HS (prostate, breast, endometrial and ovarian) and non-HS (the rest). Standardized incidence ratio (SIR) was calculated and logistics regression models were constructed to identify factors associated with cancer.

Results: We included 3539 patients (90.4% women) with SLE (ACR-97 criteria), of whom 154 had cancer (91% women), and 44 were HS (100% women). The SIR for cancer was 1.37 (95% CI: 1.15-1.59), reaching higher values in women under 65 years [2.38 (95% CI: 1.84-2.91)]. The SIR in women with cancer HS vs. non-HS was 1.02 (95% CI: 0.13-1.91) and 1.93 (95% CI: 0.98-2.89), respectively. In HS vs. non-HS cancers, age at diagnosis of SLE [Odds ratio (OR) 1.04 (p = 0.002) vs. 1.04 (p = 0.019), respectively] and the evolution time [OR 1.01 (p < 0.001) vs. OR 1.00 (p = 0.029), respectively] were factors associated with cancer. SLICC/ACR damage index [OR 1.27 (p = 0.022)] and Angiotensin-Converting Enzyme (ACE) inhibitors prescription [OR 2.87 (p = 0.048)] were associated with non-HS cancers.

Conclusion: The incidence of cancer in patients with SLE is increased compared to the Spanish population, specially in younger women. This increase might be due to non-HS cancers. SLE with more cumulative damage and more prescription of ACE inhibitors might associate with non-HS cancers.

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THU0253

EFFECT OF GLUCOCORTICOIDS ON DAMAGE ACCRUAL IN SLE PATIENTS WITH NO CLINICAL OR SEROLOGICAL DISEASE ACTIVITY

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Background: : Observational studies have previously found associations between glucocorticoid therapy and irreversible organ damage in SLE. As glucocorticoid use and lupus disease activity are highly concordant, disease activity potentially confounds analysis of the contribution of glucocorticoid use to organ damage. This could be obviated through the study of damage accrual in patients without detectable disease activity.

Objectives: We studied whether glucocorticoids contribute to damage accrual in SLE in the absence of disease activity, by analysing the effect of glucocorticoids on SLE damage accrual in patients with no clinical or serological lupus disease activity (SLEDAI-2K=0).

Methods: 1707 SLE patients were recruited from 13 centres in 8 countries and followed longitudinally between 2013-2016. As per a standardised protocol, disease activity (SLEDAI-2K) and treatment details were recorded at each visit, and organ damage measured annually (SDI). Cox-proportional hazards analyses were used to examine time-dependent associations of glucocorticoid use with damage accrual.

Results: 196/1707 (11.4%) patients had no clinical or serological disease for the entire study period (time adjusted mean (TAM) SLEDAI2K=0). Of these, 95% were female; median (IQR) age at diagnosis 36.5yrs (26.0-46.5) years, median (IQR) baseline SDI 0 (0-1). 68% were exposed to prednisolone, with a median (IQR) TAM-prednisolone dose 2mg/day (0-5). Despite SLEDAI2K=0 throughout, irreversible damage accrual occurred in 13% of the cohort, with 26 damage events captured over median (range) 1.9 years (1.0-2.2) followup. Prednisolone exposure at doses in the upper two quartiles was associated with damage accrual (HR 1.11 (1.02, 1.22), p=0.02).

Conclusion: Irreversible damage accrual occurs in patients with no clinical or serological disease activity as captured by SLEDAI-2K, and glucocorticoid use contributes to the risk of organ damage in these patients.

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