ABSTRACT NUMBER: 2924

Effect of Antimalarials over the Different Domains of the Damage INDEX in Latin American SLE Patients

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SESSION INFORMATION

Date: Wednesday, November 8, 2017

Session Title: Systemic Lupus Erythematosus – Clinical Aspects and Treatment V: Longterm Outcomes

Session Type: ACR Concurrent Abstract Session

Session Time: 9:00AM-10:30AM

Background/Purpose:

We have previously shown that Latin American SLE patients treated with Antimalarials (AMs) have a 25% lower risk of damage accrual than patients not receiving them[1]. The present study was conducted to assess the effects of AMs over the 12 items of the SLICC Damage Index, (SDI).

Methods:

Patients with a recent SLE diagnosis (≤2 years) from the GLADEL cohort were studied. End-point: Increase in the 12 items SDI since cohort entry.

Independent (socio-demographic, clinical laboratory and treatment) variables were included. The effect of AMs as a time dependent variable on items of the SDI (adjusting for potential confounders) was examined with a multivariable Cox regression model. Multivariate models were developed for the most common SDI items.

Results:

Of the 1,466 patients included in this analysis 1049 (72%) received AMs during follow-up (as defined); median exposure time: 30 months (Q1-Q3: 11–57 months). Total damage accrual occurred in 665 (45%) patients during a median follow up time of 24 months (Q1-Q3: 8-55) months. Within the 12 items of the SDI there were 301 integument, 208 renal, 149 neuropsychiatric, 98 musculoskeletal, 88 cardiovascular, 65 ocular, 43 pulmonary, 42 peripheral vascular, 33 gastrointestinal, 22 premature gonadal failure, 16 diabetes and 9 malignancy. After adjusting for potential confounders, at any time during follow-up a patient on AMs had a 35% and 30% lower risk of renal and neuropsychiatric damage accrual respectively than a patient not on AMs (adjusted HR 0.65, 95%CI 0.47–0.90 and HR 0.70, 95% CI 0.48–1.02). Such protective effect was not evident for integument, musculoskeletal and cardiovascular damage.

Conclusion:

After adjustment for possible confounding factors related to AMs use and damage accrual, AMs were independently associated with a reduced risk of renal and neuropsychiatric damage accrual in this cohort.

References:

[1]Pons-Estel G, Wojdyla D, Ugarte-Gil M, et al 192 Protective effect of antimalarials on the risk of damage accrual in systemic lupus erythematosus Lupus Science & Medicine 2017;4:doi: 10.1136/lupus-2017-000215.192

Table 1. Multivariable Cox proportional hazard model: Time-to-items damage accrual.

Endpoint	Unadjusted		Adjusted	
	HR[1] 95% CI	p-value	HR[1] (95% CI)	p-value
Integument Damage	0.987 (0.763 – 1.277)	0.9223	0.971 (0.734 – 1.286)[2]	0.8381
Renal Damage	0.516 (0.385 – 0.692)	< 0.0001	0.652 (0.472 – 0.901)[3]	0.0094
Neuropsychiatric Damage	0.651 (0.458 – 0.925)	0.0167	0.701 (0.481 – 1.024)[4]	0.0660
Musculoskeletal Damage	0.838 (0.524 – 1.340)	0.4612	0.909 (0.561 – 1.473)[5]	0.6977
Cardiovascular Damage	0.562 (0.357 – 0.886)	0.0130	0.690 (0.430 – 1.107)[6]	0.1240

[1] Hazard ratio for any antimalarial vs. no antimalarial in the previous month.

[2] Adjusted for integument domain SDI at entry, hypertension, malar rash, discoid rash, proteinuria/cilindruria, hematologic disorder, glucocorticoid pulse and SLEDAI at cohort entry.

[3] Adjusted for renal domain SDI at entry, age at diagnosis, socio-economic level, hypertension, proteinuria/cilindruria, immunosupressants and SLEDAI at cohort entry.

[4] Adjusted for neurologic domain SDI at entry, glucocorticoid pulse, NSAIDs and SLEDAI at cohort entry.

[5] Adjusted for musculoskeletal domain SDI at entry, gender, hypertension, discoid rash, oral/nasopharyngeal ulcerations, arthritis, neurologic disorder, glucocorticoids at cohort entry.

[6] Adjusted for cardiovascular domain SDI at entry, disease duration, hypertension and serositis at cohort entry.

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