AB1142 VITAMIN D LEVELS AND ASSOCIATION WITH DISEASE ACTIVITY IN PARAGUAYAN SLE PATIENTS

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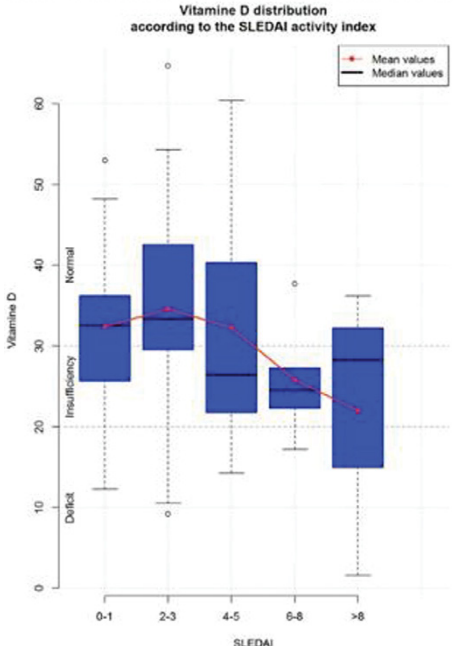
Background: Systemic Lupus Erythematosus (SLE) is a systemic inflammatory disease associated with genetic, environmental, hormonal and immunological factors. Vitamin D levels are nowadays considered as one possible factor associated with disease activity. Therefore, previous studies have analyzed vitamin D to the severity of SLE.
Objectives: To assess the Vitamin D status in paraguayan SLE patients and its association with disease activity.
Methods: An observational Trial has been performed on individuals diagnosed with SLE. Epidemiological, clinical and biochemical data have been recorded for each patient to study the association between vitamin D concentrations, the phospho-calcium metabolism parameters and disease activity. Quantitative determination of Vitamin D was perform using chemoluminescence ARCHITEC assay. Vitamin D status was interpreted as follows: deficiency ≤20 ng/ml and insufficiency 21–29 ng/ml. The statistical association tests were performed using linear (SLEDAI activity index) and logistic (Inactive/Mild vs Moderate/Severe) regressions. The epidemiological, clinical and biochemical variables were used as explanatory variables in these models.This study is a preliminary analysis of a trial supported by CONACYT (Paraguay) to investigate the role of vitamin D in patients diagnosed with SLE.
Results: We included 77 SLE patients, of whom 94.8% (73/77) were female. The average age of patients at the time of the study was 30.7±10.3 years. All patients received calcium supplements associated with vitamin D. The average vitamin D concentration was 32.2±12.10 ng /ml. 29.9% (23/77) of patients had vitamin D insufficiency and 13.0% had vitamin D deficiency. 94.8% (73/77) of the population had normal serum calcium and the total population had a normal phosphoremia. As for the dosage of PTH, it was found that 27.3% (21/77) have high values of PTH. 20.8% (16/77) of the patients had positive anti-DNA. Low C3 complement was observed in 30/77 (39%) and low C4 in 50/77 (64.9%) patients.
The mean value of SLEDAI at the time of the study was 2.32±2.83. When we study the distribution of vitamin D concentration according to the disease activity (SLEDAI) a clear pattern is observed linking lower vitamin D concentrations with higher disease activity (Figure 1). Patients with lower vitamin D concentrations are more likely to have higher disease activity (OR 0.93, 95% CI 0.88–0.99;P-Value=0.059. The means and standard deviations of vitamin D depending on the SLEDAI activity index are provided in Table 1.

Table 1. Mean and standard deviation of each patient group according to the ranges of SLEDAI activity index

SLEDAI	Mean	Standard deviation
0–1	32.41	9.61
2–3	34.59	13.37
4–5	32.28	14.38
6–8	25.8	7.61
>8	22.03	18.13

Figure 1. Distribution of vitamin D depending on the SLEDAI activity index



Conclusions: In this preliminary study of Paraguayan SLE patients, Vitamin D deficiency was frequent despite treatment with supplements. In addition, a clear association between SLEDAI and Vitamin D values was observed. The final analysis in a larger patient cohort will have to confirm these findings and clarify relation with disease activity.
References:
[1] Eloi M, Horvath DV, Ortega JC, Prado MS, Andrade LE, Szejnfeld VL, de Moura Castro CH. 25-Hydroxivitamin D Serum Concentration, Not Free and Bioavailable Vitamin D, Is Associated with Disease Activity in Systemic Lupus Erythematosus Patients. PLoS One. 2017 Jan 13;12(1).
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AB1143 THE IMPACT OF ANTI-CYCLIC CITRULLINATED PEPTIDE SEROPOSITIVITY ON EROSION PREVALENCE AMONG PATIENTS WITH RHEUMATOID ARTHRITIS OF VARYING DISEASE DURATION

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Background: Little is known regarding the prevalence of erosive disease in a contemporary cohort of patients with RA and whether erosive disease prevalence differs by disease duration and seropositivity to anti-citrullinated protein antibodies (ACPA).
Objectives: To characterize the proportion of patients with RA with erosive disease by disease duration category and stratified by positive and negative serological status (anti-cyclic citrullinated peptide [anti-CCP], a surrogate for ACPA).
Methods: We identified patients with RA aged ≥18 years who were enrolled in the Corrona registry (October 2001–June 2016), with available disease duration, radiographic/MRI/ultrasound studies and serological status based on anti-CCP. Patients were grouped based on RA disease duration (0–2, 3–5, 6–10 and >10 years from diagnosis). Unadjusted prevalence erosion rates were calculated based on the proportion of patients with reports of erosions present on joint radiographs/MRIs/ultrasounds. Seropositivity was based on laboratory results (anti-CCP ≥20 U/mL) at enrolment in the Corrona registry. Chi-squared tests were used to assess differences in prevalence rates.
Results: There were 9759 patients who met inclusion criteria. Most were women (76%), middle-aged (mean [SD] 57 years [14]), with moderate disease activity (mean [SD] CDAI 14.7 [13.4]). Prior use of at least one biologic or targeted synthetic DMARD had occurred in 41% of patients. Overall, the prevalence of erosive disease was 28.6%, with higher prevalence among CCP+ (35.4%) vs CCP– (20.1%) patients ($p<0.001$, chi-squared test). The prevalence of erosions increased with increasing disease duration ($p<0.001$; Table). For each disease duration group, the prevalence of erosions was higher in patients who were CCP+ compared with those who were CCP–.

Table 1. Prevalence of Erosions According to Disease Duration and Serological Status

	Disease duration (years)			
	0–2	3–5	6–10	>10
Overall	19.3 (905/4699)	28.3 (475/1678)	33.4 (469/1404)	47.8 (946/1978)
Serological status				
CCP–	16.1 (359/2226)	22.7 (169/744)	21.8 (128/588)	28.1 (206/733)
CCP+	22.1 (546/2473)	32.8 (306/934)	41.8 (341/816)	59.4 (740/1245)

Data are % (n/N).

Conclusions: Erosions were common in this cohort of patients, and prevalence of erosions increased with longer disease duration. Patients who were CCP+ had higher rates of prevalent erosions than those who were CCP– with similar disease duration.
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AB1144 GOOD THERAPEUTIC RESPONSE WITH BIOLOGICS: REMISSION IS REALITY. DATA FROM THE AUSTRIAN BIOREG REGISTRY

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