



LUPUS NEPHRITIS IN PATIENTS WITH AFRICAN ANCESTORS FROM MIDDLE WEST BRAZIL

Augusto Alves Pavan (Universidade Federal da Grande Dourados, Dourados, MS, Brasil), Ana Carolina Fernandes Pereira (Univesidade Federal da Grande Dourados , Dourados, MS, Brasil), Bruno Hellman Claudino (Universidade Federal da Grande Dourados, Dourados, MS, Brasil), Tatiane Galdino Leal (Hospital Universitário da UFGD, Dourados, MS, Brasil), Marcia Midori Shinzato (Universidade Federal da Grande Dourados, Dourados, MS, Brasil)

BACKGROUND

Systemic Lupus Erythematosus (SLE) is an autoimmune inflammatory disease, which clinical features show considerable variation across the world. Brazil has a variety of racial mixtures. Therefore, we compare clinical and immunological features of the 2 predominant self-reported ethnic groups from middle west Brazil, especially lupus nephritis (LN) because several studies have been described that Hispanic, African American and Asian patients develop more LN than patients of European descent.

MATERIALS AND METHODS

We studied 80 consecutives patients who met the 2012 Systemic Lupus International Collaborating Clinics (SLICC) criteria from march 2017 to march 2019 and sign written informed consent. Research was approved by local ethics committee. Brazilian Amerindian and Asian descents and those with diseases onset before 16 years-old were excluded. Demographic, clinical and laboratory features according to the definitions of 2012 SLICC criteria of SLE patients, ≥ 18 years old were obtained by chart review. SLE Disease Activity Index (SLEDAI), Systemic Lupus Damage Index (SDI) were also obtained. Self-identified ethnicity was defined as white (European ancestors and without African ancestor) and African-Brazilian (African ancestry irrespective if they have other ancestors). Categorical and continuous variables were analysed by qui-squared or Fisher' exact and t Student or Mann-Whitney tests, respectively. Results were considered significant at two-tailed $p < 0.05$.

RESULTS

SLE patients mean age was 37.86 (± 12.60), 88.75% were female, 35 (43.75%) white and 45 (56.25) African-Brazilian. They have a mean diseases duration of 8.14 (± 5.71) years. Fifth-six (70%) presented acute cutaneous lupus, 7.5% chronic cutaneous lupus, 18.75% oral or nasal ulcers, 40% alopecia, 71.25% joint diseases, 17.5% serositis, 45% glomerulonephritis, 16.25% neurological involvement, 21.25% haemolytic anaemia, 40% leucopenia/lymphopenia and 6.25% thrombocytopenia. Seventy- eighty out 80 (97.5%) were positive for antinuclear antibodies (ANA). Positivity for specific antibodies were: 28/76 (36.84%) anti-double stranded DNA (anti-dsDNA), 20/76 (26.31%) anti-Sm, 18/68 (26.47%) antiphospholipid. Comparing white and African-Brazilian patients: glomerulonephritis was diagnosis in 21/35 (60%) in the first group and in 15/45 (33.33%) in the last one, $p=0.031$. Other clinical and laboratory criteria features, SLEDAI and SDI were similar in both groups. In the African-Brazilin group, anti-dsDNA antibodies were positive in 8/13 (61.54%) patients with LN and in 7/30 (23.33%) patients without LN, $p=0.039$. In white patients group this correlation was not observed.

CONCLUSION

Frequency of LN in Brazilian patients with African Ancestors is lower than in self-reported white patients. And only in this group, Anti-ds-DNA antibodies is correlated with LN.