COMPARISON OF CUMULATIVE DISEASE DAMAGE IN SMOKERS VS. NON-SMOKERS SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS THROUGH THE SLICC/ACR INDEX

Kamilla de Bessa Jorge^{1,*}, Nelzi Ferreira de Queiroz Júnior¹, Arturo Vincenzo Dassoler Puff¹, Tiago Takahiro Hioki¹, Thiago Alberto Gomes Dos Santos¹, Thelma Larocca Skare¹

1.Hospital Universitário Evangélico Mackenzie, Curitiba (PR), Brazil.

*Corresponding author: kamillabessajorge@gmail.com

BACKGROUND

Systemic lupus erythematosus (SLE) is a multisystemic, chronic inflammatory disease of unknown cause and autoimmune nature. Tobacco has effects on SLE disease activity, since it has several chemical factors that affect cell growth. Cigarette chemicals are metabolized, generating free radicals that interact with DNA and cause oxidative damage to nuclear constituents. It also modifies the response to drug treatment: antimalarial and belimumab are medications that suffers influence of tobacco. The aim of this study was to compare the cumulative disease damage in SLE patients with and without tobacco exposure.

METHODS

Retrospective study of 100 SLE patients: 50 smokers vs. 50 nonsmokers from a single rheumatology center. Collected information included epidemiological, clinical and laboratory data to calculate cumulative damage through the Systemic Lupus International Collaborating Clinics /American College of Rheumatology (SLICC/ACR) damage index.

RESULTS

Smokers and nonsmokers patients were paired for gender, age and disease duration. No differences between the two groups were observed in the total result of SLICC/ACR damage index. However, when the different domains were studied, smokers had more ocular and cardiovascular damage than nonsmokers (both with $p=0.02$).

CONCLUSION

Systemic lupus erythematosus patients that smoke have more cumulative damage including the cardiovascular and ocular areas.

KEYWORDS

Systemic lupus erythematosus, Tobacco, Cumulative damage.