



DOES THE USE OF DMARDS INFLUENCE THE PERIODONTAL AND SALIVARY CYTOKINE PROFILES OF WOMEN WITH RHEUMATOID ARTHRITIS?

Thayanara Melo (Federal University of Pernambuco, Recife, PE, Brasil), Marina Maymone (Federal University of Pernambuco, Recife, PE, Brasil), Ana Karine Soares (Federal University of Pernambuco, Recife, PE, Brasil), Aysa Pinheiro (Clinical Hospital of Federal University of Pernambuco, Recife, PE, Brasil), Paula Toche (Clinical Hospital of Federal University of Pernambuco, Recife, PE, Brasil), Maira Pitta (Federal University of Pernambuco, Recife, PE, Brasil), Moacyr Rego (Federal University of Pernambuco, Recife, PE, Brasil), Rafaela Silva Guimaraes Gonçalves (Clinical Hospital of Federal University of Pernambuco, Recife, PE, Brasil), Angela Luzia Branco Pinto Duarte (Clinical Hospital of Federal University of Pernambuco, Recife, PE, Brasil), Luiz Alcino Gueiros (Federal University of Pernambuco, Recife, PE, Brasil)

BACKGROUND

Rheumatoid arthritis (RA) and periodontitis are inflammatory disorders that share some pathogenic mechanisms and frequently coexist. Periodontitis tends to be more severe in RA patients, but data about the effect of RA treatment on periodontitis severity are scarce. We evaluated the influence of RA treatment on the periodontal pattern and on salivary cytokines levels.

MATERIALS AND METHODS

120 women (≥ 18 years) diagnosed with RA who met the criteria of ACR 1987 or ACR/EULAR 2010, were evaluated and analyzed according to the treatment regimen in use: synthetic conventional (sc) and biological (b) DMARD. 60 women in each group. Patients underwent periodontal assessment and had their resting salivary flow measured. Saliva samples were obtained to measure IL-2, -4, -6, -10, -17, TNF and IFN- γ cytokines levels.

RESULTS

The use of scDMARD was associated with a higher frequency of periodontitis ($p = 0.028$). Patients on glucocorticoids had a higher frequency of periodontitis (80.22% x 19.78%, $p < 0.001$). Salivary levels of cytokines were similar between the two groups; however, patients treated with bDMARDs had lower rates of salivary flow ($p = 0.001$).

CONCLUSION

Patients using scDMARDs had a higher frequency of periodontitis. However, the use of glucocorticoids in women with RA increases the frequency of periodontitis more importantly than DMARD therapy. We did not observe differences concerning the periodontal parameters and in the expression of the salivary cytokines.