





# EVALUATION OF CARDIOVASCULAR RISK IN WOMEN WITH RHEUMATOID ARTHRITIS THROUGH THE DOPPLER ULTRASOUND OF CAROTID AND FEMORAL ARTERIES

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## **BACKGROUND**

The increase of cardiovascular diseases in patients with rheumatoid arthritis (RA) is recognized, even in the absence of traditional risk factors. Aiming to make cardiovascular evaluation in these patients more reliable, EULAR recommends multiplying the score used by 1.5. This study aims to evaluate the cardiovascular risk of the patients considered as low risk by the Framingham (EF) score and stratify them by carotid and femoral Doppler Ultrasound (USG-D), for the purpose of an early diagnosis of asymptomatic disease, reducing morbimortality.

#### **MATERIALS AND METHODS**

The research was performed in a tertiary hospital rheumatology service, with 70 women characterized as low cardiovascular risk according to EF, being divided into control and RA patients, this one subdivided into patients who maintained low risk according to EULAR guidelines. Data were collected through interviews, laboratory tests and carotid and femoral USG-D. A chi-square, fisher and t-test was used for analysis.

## **RESULTS**

A total of 39 patients were obtained for the RA group, with a mean age of 59 and 31 women for the control group with a mean age of 51. In the analysis of cholesterol profile, the AR group obtained the following mean: Total Cholesterol 196, LDL 114 and HDL 57; The control group: Total Cholesterol 182; LDL 107, HDL 51. No significant difference between the results. Regarding the traditional comorbidities influencing cardiovascular risk, homogeneous samples were obtained, with no significant difference between the groups. The analysis of carotid and femoral USG-D showed a change in the mean intimal thickness (EMI) in 14.3% of the RA group and 4.3% in the control group and presence of atherosclerotic plaques in 14.3% of the RA group and 2, 9% in the control group, with a significant difference (p <0.05), and a relative risk was found for a patient with RA to have a change to the USG-D of 3.25. When the RA group was adjusted according to EULAR guidelines, there was presence of plaque in 25.9% and EMI alteration in 14.8%, with a significant difference when compared to the control group (p <0.05).

# CONCLUSION

The data found corroborate with the literature, demonstrating that RA corresponds as an independent factor to increase Cardiovascular Risk, and USG-D should be a tool used for such stratification in these patients. It should be noted that in the analysed group, the recommended adjustment for PE for RA was insufficient to predict the cardiovascular risk of these patients.