Radiofrequency us and overdiagnosis of atherosclerosis in individuals with psoriatric arthritis

Jeisyane Acsa Santos do Nascimento¹ , Nayara Ribeiro Máximo de Almeida² , Francisco Costa da Rocha¹ , Johnnatas Mikael Lopes² , Marcello Barbosa Otoni Goncalves Guedes^{1*}

Dear Editor,

Atherosclerosis is an inflammatory vascular disease, caused by the deposition of cells, lipids, and tissue debris in the vascular intimal layer. Among the risk factors for this disease are sedentary lifestyle, poor diet, systemic arterial hypertension, and smoking¹.

Psoriasis is a common chronic inflammatory disease of the skin, with characteristic features of erythematous plaques demarcated by whitish scales. It is not only restricted to skin involvement but can also affect joints and other organs. Thus, psoriasis is not a specifically dermatological pathology but a systemic one, as demonstrated in studies that indicate a higher prevalence of diabetes and cardiovascular disease correlated with the severity of psoriasis².

Thus, when reading the article by Ozisler C, Kaplanoglu H, Sandikci SC, Ozisler Z, entitled "Evaluation of subclinical atherosclerosis by ultrasound radiofrequency data technology in patients with psoriatic arthritis," one can see the importance of highlighting elements relevant to the management of psoriatic arthritis, atherosclerosis. Thus, the magnitude of the structural differences in the arteries between the group with psoriasis and the control is notorious. Hence, when comparing the variables in Table 2 of the aforementioned article, through the calculation of Cohen's d, it is possible to show that in all of them there are effects considered to have a moderate to very large real impact.

In view of this, it is possible to conclude that these probabilistic and structural measurement differences may have diagnostic or prognostic utility. However, they are still just differences. Furthermore, the identification of structural

alterations still in the preclinical phase can reduce the incidence of cases with clinical manifestations and, therefore, false positives and overdiagnoses⁴. Therefore, the finding of greater thickening and stiffness in the structure of the carotid artery in individuals with psoriasis, as well as this identified subclinical state, need to be clarified as really pathological in view of their possible impacts on the outcomes of clinical manifestation and death.

Thus, it is worth mentioning that the indiscriminate use of diagnostic/prognostic tests without estimated effectiveness on the prescription and therapeutic results causes psychological, financial, and physical loss to individuals undergoing unnecessary treatments, in addition to excessive costs to the health system. We therefore recommend that future studies should focus on the follow-up of individuals with psoriasis, assessing the difference in outcomes under and without treatment, and in the population, in which atherosclerosis and psoriasis do not coexist.

AUTHORS' CONTRIBUTIONS

JASN: Formal Analysis, Methodology, Visualization, Writing – original draft, Writing – review & editing. FCR: Formal Analysis, Methodology, Visualization, Writing – original draft, Writing – review & editing. NRMA: Formal Analysis, Writing – original draft, Writing – review & editing. JML: Conceptualization, Formal Analysis, Investigation, Methodology, Project management, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing. MBOGG: Formal Analysis, Writing – original draft, Writing – review & editing.

Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none.

Received on March 22, 2023. Accepted on March 28, 2023.

¹Universidade Federal do Rio Grande do Norte - Natal (RN), Brazil.

²Universidade Federal do Vale do São Francisco - Paulo Afonso (BA), Brazil.

^{*}Corresponding author: marcello.guedes@ufrn.br

REFERENCES

- Kong P, Cui ZY, Huang XF, Zhang DD, Guo RJ, Han M. Inflammation and atherosclerosis: signaling pathways and therapeutic intervention. Signal Transduct Target Ther. 2022;7(1):131. https://doi. org/10.1038/s41392-022-00955-7
- Ludwig RJ, Herzog C, Rostock A, Ochsendorf FR, Zollner TM, Thaci D, et al. Psoriasis: a possible risk factor for development of coronary artery calcification. Br J Dermatol. 2007;156(2):271-6. https://doi.org/10.1111/j.1365-2133.2006.07562.x
- Ozisler C, Kaplanoglu H, Sandikci SC, Ozisler Z. Evaluation of subclinical atherosclerosis by ultrasound radiofrequency data technology in patients with psoriatic arthritis. Rev Assoc Med Bras. 2022;68(12):1645-50. https://doi.org/10.1590/1806-9282.20220416
- Macedo LE, Faerstein E. Colesterol e a prevenção de eventos ateroscleróticos: limites de uma nova fronteira. Rev. Saúde Pública. 2017;51:2. http://doi.org/10.1590/S1518-8787.2017051006416

ERRATUM

https://doi.org/10.1590/1806-9282.20230182ERRATUM

In the manuscript "Radiofrequency us and overdiagnosis of atherosclerosis in individuals with psoriatric arthritis", https://doi. org/10.1590/1806-9282.20230182, published in the Rev Assoc Med Bras. 2023;69(7):e20230182, on page 1:

Where it reads:

Jeisiane Acsa Santos do Nascimento

It should read:

Jeisyane Acsa Santos do Nascimento

