



# ACTAS Derma-Sifiliográficas

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## LETTER TO THE EDITOR

### Comment on “Cardiovascular Risk Factors and Carotid Intima-Media Thickness in a Colombian Population With Psoriasis”<sup>☆</sup>



### Réplica a «Factores de riesgo cardiovascular y grosor de la íntima media carotídea en una población colombiana con psoriasis»

Dear Editor:

We read with great interest the article “Cardiovascular risk factors and carotid intima-media thickness in a Colombian population with psoriasis” by A. Argote et al.<sup>1</sup> The authors of the article report on the prevalence of cardiovascular risk factors, metabolic syndrome, and increased carotid intima-media thickness (CIMT) in a group of 40 patients with psoriasis with no control group. In the discussion, the authors indicate that increased CIMT contributes to atherosclerotic processes and the development of cardiovascular events. They go on to highlight the importance of CIMT as a sub-clinical predictor of cardiovascular risk that could be useful for guiding treatment decisions in this setting. We would like to make the following comments with respect to these statements.

While CIMT was initially used as a biomarker for subclinical atherosclerosis,<sup>2</sup> it is now generally accepted that it is a poor predictor of cardiovascular risk and that, in most cases, it is not related to atherosclerosis and does not significantly increase the predictive capacity of a simple analysis of traditional cardiovascular risk factors.<sup>3</sup> For this reason, CIMT has been eliminated from the American College of Cardiology/American Heart Association Guideline.<sup>3,4</sup>

We would also like to make the point that any assessment of cardiovascular risk by carotid ultrasound must take into account 2 important considerations. The measurement of CIMT in an area of the carotid artery where there is

no atheromatous plaque does not represent the degree of atherosclerosis. However, when the thickness of a plaque is included in the CIMT measurement, the resulting value does relate to the degree of atherosclerosis because the simple presence of atheromatous plaque is a predictor of cardiovascular risk.<sup>3</sup>

For this reason, it is accepted that the study of cardiovascular risk by carotid and/or femoral ultrasound should always be based on the study of atheromatous plaque, assessing one of the following: the simple presence of plaque by two-dimensional (2D) ultrasound, total plaque area by 2D ultrasound, or total plaque volume by 3D ultrasound.<sup>3</sup>

In such an ultrasound assessment of cardiovascular risk, it is sufficient to study the simple presence of atheromatous plaque<sup>3</sup>; however, to monitor the progression or regression of plaque size over time or as a response to treatment, changes in the total plaque area or volume must also be evaluated.<sup>3</sup> The drawback is that monitoring total plaque area or volume increases the complexity of the study and the time spent. It must be assumed that, at this time, ultrasound study of CIMT does not provide reliable data as a subclinical predictor of cardiovascular risk and that, in this respect, it has been displaced by the ultrasound study of atheromatous plaque, which involves assessing the presence of plaque and, in some cases, total plaque area or volume, depending on the desired clinical objectives and the means available.

## References

1. Argote A, Mora-Hernández O, Milena Aponte L, Barrera-Chaparro DI, Muñoz-Ruiz LM, Giraldo-Mordecay L, et al. Factores de riesgo cardiovascular y grosor de la íntima media carotídea en una población colombiana con psoriasis. *Actas Dermosifiliogr.* 2017;108:738–45. <http://dx.doi.org/10.1016/j.ad.2017.04.015>.
2. Lorenz MW, Markus HS, Bots ML, Rosvall M, Sitzer M. Prediction of clinical cardiovascular events with carotid intima-media thickness: A systematic review and meta-analysis. *Circulation.* 2007;115:459–67. <http://dx.doi.org/10.1161/CIRCULATIONAHA.106.628875>.
3. Spence JD. Carotid ultrasound phenotypes are biologically distinct. *Arterioscler Thromb Vasc Biol.* 2015;35:1910–3. <http://dx.doi.org/10.1161/ATVBAHA.115.306209>.
4. Goff DC, Lloyd-Jones DM, Bennett G, Coady SF, D’Agostino RB Sr, Gibbons R, et al., American College of Cardiology/American Heart Association Task Force on Practice Guidelines. 2013 ACC/AHA guideline on the assessment of cardiovascular risk: A report of the American College of Cardiology/American Heart Association Task Force on practice

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guidelines. *J Am Coll Cardiol.* 2014;63:2935–59, <http://dx.doi.org/10.1016/j.jacc.2013.11.005>.

5. Laclaustra M, Casanovas JA, Fernández-Ortiz A, Fuster V, León-Latre M, Jiménez-Borreguero L, et al. Femoral and carotid sub-clinical atherosclerosis association with risk factors and coronary calcium: The AWHS study. *J Am Coll Cardiol.* 2016;67:1263–74, <http://dx.doi.org/10.1016/j.jacc.2015.12.056>.

Á. González-Cantero,<sup>a,\*</sup> J. González-Cantero,<sup>b</sup>  
A.I. Sánchez-Moya,<sup>a</sup> C. Pérez-Hortet,<sup>a</sup>  
C. Schoendorff-Ortega<sup>a</sup>

<sup>a</sup> *Servicio de Dermatología, Complejo Hospitalario de Toledo, Toledo, Spain*

<sup>b</sup> *Servicio de Radiodiagnóstico, Hospital Gregorio Marañón, Madrid, Spain*

\* Corresponding author.

*E-mail address:* [alvarogc261893@hotmail.com](mailto:alvarogc261893@hotmail.com)

(Á. González-Cantero).