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Impact of Physical Activity on Preclinical Atherosclerosis in Premenopausal Women / Mattioli, Av; Coppi, F; Ballerini Puviani, M; Farinetti, A. - In: ANNALS OF VASCULAR SURGERY. - ISSN 0890-5096. - 53:(2018), pp. 279-279. [10.1016/j.avsg.2018.06.004]

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20/05/2026 08:25

(Article begins on next page)

### Impact of Physical Activity on Preclinical Atherosclerosis in Premenopausal Women



Dear Editor,

We have read with great interest the article “Cardiopulmonary Exercise Testing Limitation in Peripheral Arterial Disease.” by Baloch et al.,<sup>1</sup> and we found their results of importance in the field of clinical prevention.

Authors provide a basis for further utilization of cardiopulmonary exercise testing termination as a potential screening signal for further peripheral arterial disease investigation.

With reference to the findings reported in the article, we would like to make the following contribution to the discussion. In a group of 650 asymptomatic premenopausal women, we evaluated the effects of physical activity in a healthy lifestyle.<sup>2</sup> Dietary analysis focused on chocolate, coffee, and wine intake as sources of antioxidants. Physical activity was self-assessed by using a questionnaire.<sup>3</sup> The prevalence of preclinical atherosclerosis was evaluated by using the ankle brachial index (ABI).<sup>4</sup> We found that women with normal ABI had high levels of physical activity, higher adherence to Mediterranean diet, lower body mass index compared to women with low ABI. Dietary behaviors showed a great intake of fruit, vegetables, and dark chocolate; food categories that are rich in antioxidants were associated with a normal body mass index and a low risk of preclinical atherosclerosis. It is possible that the antioxidants included in food, particularly in dark chocolate and coffee, associated with high level of physical activity positively acts the development of atherosclerosis.<sup>2,4</sup> We can suppose that a healthy lifestyle that include physical activity could help in the prevention of preclinical atherosclerosis. In our analysis, we explore chronic intake of chocolate and we found that women with normal ABI were more likely to eat dark chocolate compared to milk chocolate or chocolate snack. A recent study found that consumption of almonds alone or combined with dark chocolate improves lipid profile.<sup>5</sup> Mediterranean diet is a healthy diet associated with reduction in cardiovascular mortality and coronary events. We suggest that chocolate can be part of a healthy diet and association with physical activity can prevent atherosclerosis in women.

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<http://dx.doi.org/10.1016/j.avsg.2018.06.004>

### Regarding “Baroreceptor Activation Therapy 2 Decades after Vascular Surgery on Both Carotid Arteries in a Patient with Resistant Hypertension: First Case Report in the Literature”



Dear Sir,

I read with interest the article by Blanke et al.<sup>1</sup> and agree with the authors regarding the importance of potentially improving autonomic modulation in patients with resistant hypertension.

Regarding patients previously submitted to carotid endarterectomy (CEA), however, the alleged permanent detrimental effects of CEA on the carotid sinus nerve reported by the authors have been in fact proven inaccurate.<sup>2</sup>

Previous studies have thoroughly demonstrated that CEA, regardless of the surgical technique employed and even when performed on both sides, does not entail a permanent carotid sinus denervation, as both baroreflexes and chemoreflexes are preserved at long-term follow-up.<sup>2</sup> Also, regarding the undeserved bad reputation of the eversion CEA (eCEA) as related to postoperative autonomic