Re: The Influence of Statin Medications on Prostate-Specific Antigen Levels

In a recent article in the Journal (1), Hamilton et al. provided further evidence of the possible role of statins in modulating prostate-specific antigen (PSA) plasma levels. As clinical lipidologists, we found the report of another extra-metabolic effect of statins to be of interest. However, because 95% of patients analyzed were treated with simvastatin, it may be more correct to report the results obtained when other statins, especially the hydrophilic ones that are less likely to interact with the prostate, are excluded (2). Moreover, when assessing the association between percent decline in PSA concentration and percent decline in low-density lipoprotein cholesterol (LDL-C) concentration after taking a statin, the extreme values of the distribution should be excluded from the analysis because an LDL-C reduction exceeding 50% is rarely obtainable with standard statin dosage or with simvastatin at any dosage (3), and an LDL-C increase under statin treatment is also very unlikely unless there is a lack of adherence to the prescribed therapy. On the other hand, it is possible that the LDL-C increase seen in some patients was related to an unbalanced diet high in saturated and trans-unsaturated fatty acids, which has been associated with prostate cancer incidence (4). Therefore, the data should be stratified by body mass index, or even better by metabolic syndrome diagnosis (because there is support for either a detrimental (5) or a protective (6) effect of overweight on PSA increase and prostate diseases), even if globally no body weight change was observed. Also to be considered in this patient sample is the chronic use of nonsteroidal anti-inflammatory drugs, which has been associated with a reduction in PSA level in different studies (7). This is particularly relevant because the mean age of the patients considered in the study is the same age for which the highest use of anti-inflammatory drugs was observed.

ARRIGO F. G. CICERO
GIUSEPPE DEROSA
ANTONIO V. GADDI

References


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Affiliations of authors: Internal Medicine, Aging and Kidney Disease Department, University of Bologna, Bologna, Italy (AFGC, AVG); Internal Medicine and Therapeutics Department, University of Pavia, Pavia, Italy (GD).

Correspondence to: Arrigo F. G. Cicero, MD, PhD, “G. Descovich” Atherosclerosis Research Centre, Internal Medicine, Aging and Kidney Diseases Department, S. Orsola-Malpighi Hospital, Via Massarenti 9—Pad. 22, 40138 Bologna, Italy (e-mail: afgcicero@cardionet.it).

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