REFERENCES


REPLY

We appreciate Dr. Bach’s interesting comments regarding our study of the changes in coronary endothelial dysfunction occurring after lipid lowering (1). We certainly agree that the segmental heterogeneity of these changes in response to acetylcholine suggests a level of complexity that has been previously underemphasized.

The reduction in clinical events in groups of patients on lipid-lowering therapy is irrefutable. Our work confirms previous reports that this therapy can also improve endothelial function in a group of patients. However, as in all therapies, not all patients respond equally, and the inclusion of all analyzable coronary segments in our study expands on the original observation of El-Tamimi et al. (2) that not all areas of the artery respond equally.

As pointed out in our current study (1) as well as in our earlier work (3), it is difficult to separate true physiologic heterogeneity from methodologic variability inherent in all analytic techniques. We reiterate that the phenomenon of regression to the mean may well account for some of the findings of most constricted and most dilated segmental responses being moderated on follow-up. However, the conclusion that some responses are actually adversely affected by lipid reduction cannot be made by our study given the lack of a comparative placebo group—a more abnormal response might be expected at follow-up given the natural history of atherosclerotic coronary disease, and some of these "worsened" responses could have been an improvement over that seen in the absence of lipid reduction.

We agree that the pattern of vasomotor response and the correlation with oxidized low-density lipoprotein may possibly reflect a given patient’s clinical response to lipid-lowering therapy. This observation deserves further study.

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