COMMENTS AND RESPONSES

Response to Comment on: Hanssen et al. Associations Between the Ankle-Brachial Index and Cardiovascular and All-Cause Mortality Are Similar in Individuals Without and With Type 2 Diabetes: Nineteen-Year Follow-Up of a Population-Based Cohort Study. Diabetes Care 2012;35:1731–1735

Dr. Tasci (1) seems to have completely missed the main point of our article (2). He seems to think that we found no associations between the ankle-brachial index (ABI) and all-cause and cardiovascular mortality, whereas in fact we found strong associations, which, importantly, were similar in individuals with and without diabetes.

1. The most recent American Heart Association guideline indeed states that the most precise estimate of the ABI is obtained by measuring pressures in both ankle arteries (3). However, even if we misclassified some individuals as having a low ABI, we still found strong associations between the ABI and mortality. The same is true if we misclassified any individuals with a high ABI (>1.4) as having normal ABI. Therefore, this issue, if anything, would result in underestimation of the associations between abnormal ABI and outcomes.
2. The conclusion that the higher prevalences (ranging from 3 to 5.7%) of a high ABI reported in other Dutch cohort studies are attributable to the ABI measurement method used is unwarranted. These different prevalences may also be attributable to chance, and/or to higher prevalence of risk factors for having a high ABI (>1.4) in these cohort studies. In fact, in the (Dutch) Cohort on Diabetes and Atherosclerosis Maastricht (CODAM) study (4), a cohort study similar to the Hoorn Study but with ankle pressures determined in both arteries of each leg, the prevalence of a high ABI was also very low (1.6%).
3. It is unlikely that including individuals with impaired glucose metabolism in analyses comparing individuals with and without diabetes confounded our results because we adjusted for the presence of impaired glucose metabolism in all analyses.

In conclusion, our data show a strong association between a low ABI and adverse outcomes, which was similar in individuals without and with diabetes. In individuals without diabetes, a low ABI may be used for refinement of risk stratification (5). It should now be formally investigated whether this is also the case in individuals with diabetes, an issue we could not address in our study because of lack of sufficient power.

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