The Women’s Health Initiative Calcium/Vitamin D Trial

To the Editor:

We appreciate the excellent review of research pertaining to vitamin D and hypertension by Vaidya and Forman in the recent issue of Hypertension.1 We agree with nearly all of their comments regarding the limitations of the Women’s Health Initiative Calcium/Vitamin D Trial regarding the effect of vitamin D supplementation on blood pressure (BP) and incident hypertension. However, we disagree with their final listed limitation that initiation of antihypertensive medication during follow-up was not taken into account in the analysis. In the analysis of incident hypertension, we excluded all of the women who had evidence of hypertension at trial enrollment (self-reported antihypertensive treatment, antihypertensive medication recorded in the medication inventory, or measured BP ≥140/90 mm Hg before randomization.) Trial participants received semiannual mailed questionnaires that inquired about initiation of antihypertensive medication, and BP was measured annually. Incident hypertension was defined as self-reported new antihypertensive treatment or measured BP ≥140/90 mm Hg after randomization. Thus, initiation of antihypertensive medication was taken into account, and there was no difference in incident hypertension between the calcium/vitamin D supplement and the placebo groups (hazard ratio: 1.01 [95% CI: 0.96 to 1.06]) There was also no difference between the groups in starting antihypertensive medications (hazard ratio: 1.04 [95% CI: 0.93 to 1.16]). In the analysis of BP change, which also did not differ between the treatment groups, there was no difference in antihypertensive treatment between the groups at randomization (28%).2 Because this was an intention-to-treat analysis of a randomized trial, we did not adjust for initiation of antihypertensive therapy, but it is highly unlikely that this would have differed between the 2 groups given the results described above for incident hypertension.

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Disclosures

None.

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