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SHORT-AXIS VIEW IN TRANSTHORACIC ECHOCARDIOGRAPHY FOR THE EVALUATION OF THE AORTIC ROOT MAXIMUM DIMENSION Reply to the Editor:

My coauthors and I read with great interest the letter by Michelena and colleagues commenting on our article and mentioning their study (Park and colleagues¹) regarding the problem of the underestimation of aortic root dimensions in patients with bicuspid aortic valves. First and foremost, we would like to congratulate them on their impressive research regarding this clinically important diagnostic problem.

In our study,² the inner wall to inner wall measurement method was used for computed tomographic (CT) angiography, and the inner edge to inner edge method was applied in the long-axis view in the transthoracic echocardiography (TTE). We used the inner edge to inner edge modality for the TTE because we believed that it reflected the inner wall to inner wall CT angiography measurements. The maximum root dimension differed between these CT and TTE measurements on average by 4.2 ± 2.8 mm. The difference is comparable with the findings from the study by Park and colleagues.¹ These results indicate that the measurements of the aortic root performed in a long-axis view in the TTE carry an unacceptable risk of underestimation

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of its maximum dimensions. We agree with Michelena and colleagues that the short-axis TTE view with a leading edge to leading edge method should become the first-line approach for the assessment of the aortic root maximum dimensions. We believe that it could be a standard method not only for patients with bicuspid aortic valve but for all patients.

Nevertheless, we would like to emphasize that CT angiography should also be performed as part of the preoperative assessment in all patients with a bicuspid aortic valve or a significant aortic dilatation as it allows for detailed evaluation of the entire aorta and enables detection of other aortic pathologies that are common in these subsets of patients.

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