Response to Letter About Article, “Left Ventricular Wall Thickness and the Presence of Asymmetric Hypertrophy in Healthy Young Army Recruits: Data From the LARGE Heart Study”

That left ventricular growth occurs in response to exercise is, of course, well known. This relates to the increase in cardiac work, in turn a function of increased volume and pressure loading. As such, variation in the left ventricular hypertrophic response to exercise will result from differences in the external work undertaken, the cardiac work performed to deliver this work (the environmental stimulus to growth), and the genetic background of each individual.\(^1\)

As such, we do not doubt that differences in the pressor response to exercise may have contributed to the differences in hypertrophy noted. With regret, we do not have data with respect to our recruits’ blood pressure response to exercise, much of which was done in the field, making this difficult to acquire. However, this was not the intention of our article, whose key point was that such hypertrophy may commonly be asymmetrical in nature.\(^2\) Whether differences in pressure loading contributed to such differences in hypertrophic pattern cannot be ascertained from our study nor from those reported by Dr Yalçin et al.

Concerning whether some forme fruste of hypertension existed in our subjects, we would note that all of the subjects studied were either in their teens or early twenties. This contrasts sharply with the patient populations in the studies referenced by Dr Yalçin, where participants were on average in their midforties.\(^3,4\) We believe that subclinical hypertension is, therefore, much less likely to be a factor in our cohort than in those studies. Moreover, we did not observe an increase in our subjects’ blood pressure readings after the training regime (indeed among those who developed asymmetrical wall thickening, diastolic blood pressure reduced: pre 120/84 versus post 115/61), confirming that the development of hypertension before the end of the follow-up period is unlikely to be of relevance.

Disclosures

None.

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