

CORRESPONDENCE

Hypertension guidelines : the need for robust surrogate endpoints of central blood pressure

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We read the guidelines¹ with interest. Many practical issues have been addressed in these guidelines. However, it would have been much better if the validation involved validation against more robust surrogate endpoints of central blood pressure rather than peripheral blood pressure.^{2–4} These more robust endpoints could include MR-derived aortic distensibility,⁴ MR-derived pulse wave velocity,^{5,6} or central-derived blood pressure measures (such as tonometric pulse wave velocity, CAVI or the augmentation index). This validation is important because central blood pressure is the pressure that the left ventricle ‘sees’. As we move down the vascular tree, the stiffness of the vessels increases; hence, the capacity to dampen the aortic pressure decreases, and the peripheral pressure is therefore several mm of Hg higher than the central blood pressure.^{7,8}

This stiffness of the blood vessels also depends on many factors, including age, gender and BMI. When advising patients

about the self-monitoring of blood pressure, a ‘normal individualized range’ should be recommended. However, to achieve this target monitoring would be required in the clinic for a certain period.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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