Is Siesta Masking Masked Hypertension?

To the Editor:

Banegas et al.,1 for the Spanish Society of Hypertension Ambulatory Blood Pressure Monitoring Registry Investigators, have examined the sensitivity and specificity of office blood pressure measurements in assessing control of hypertension in treated patients. The “gold standard” reference was the daytime component of a 24-hour ambulatory blood pressure monitoring. In this manner, 33.4% had a false-positive office blood pressure measurement (the equivalent of white-coat hypertension in non-treated patients), whereas only 5.4% had a false-negative result (corresponding with masked hypertension). Thus, underestimation of BP control by office measurements was clearly more prevalent than overestimation. This differs from the findings in general,2 hypertensive,3 and referred4 populations, in whom white-coat hypertension and masked hypertension have rather similar prevalence (~10% to 20% each entity). The impression is that treated Spanish participants’ control rates are better than those considered previously.

A possible explanation for this encouraging finding would be a preferential effect of treatment on ambulatory blood pressure, as opposed to clinic blood pressure. However, another possibility that requires consideration is that the gold standard reference was inadequate. First, defining normal ambulatory blood pressure according to daytime (awake state) measurements alone may misclassify ≥4% of the patients as controlled, whereas, in fact, their 24-hour blood pressure is abnormal.5

Second, to be valid, the daytime blood pressure average used to judge ambulatory blood pressure normality must only include measurements taken in the awake state. Had values recorded during daytime napping (namely, siesta) been included with the awake measurements, they would falsely lower these averages, thus erroneously presenting high rates of daytime ambulatory blood pressure control. Perhaps a way to overcome both issues, before endorsing the encouraging message of Banegas et al.,1 is to use 24-hour blood pressure normality as the gold standard reference.

Disclosures

None.

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