



Response to Prevalence and Risk Factors of Masked Hypertension Identified by Multiple Self-Blood Pressure Measurement

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I would like to thank Lee and Park¹ for their comments on my review of ambulatory blood pressure measurement (ABPM)² and for presenting their interesting data on self-blood pressure measurement (SBPM) in >5000 hypertensive patients.

The authors suggest that, whereas ABPM provides a greater amount of information on blood pressure behavior than SBPM, its routine use is limited by its expense and the discomfort of the technique that may limit normal activities. ABPM certainly offers greater information than SBPM, most especially in identifying nocturnal hypertension, dipping, nondipping, and the morning surge, all of which are accepted as factors that may have a profound influence on cardiovascular outcome.^{2,3}

The view expressed by the authors that the expense of ABPM should limit its routine use in clinical practice has been bandied about for years despite the fact that it has been shown that ABPM can result in a potential savings of 3% to 14% for cost of care for hypertension and 10% to 23% reduction in treatment days when the technique is incorporated into the diagnostic process. These estimates do not take into account the financial saving of provided by the dabl ABPM program, which generates an interpretative report (thereby dispensing with the time and cost for an expert to report on the data), to which may be added the potential savings inherent in the provision of online analysis of ABPM data.

The authors also suggest that the "discomfort" of ABPM is an advantage over SBPM. However, to obtain a BP profile that equates to daytime ABPM, it is necessary for daily duplicate morning and evening SBPM measurements on 7 days, with the first day readings being discarded and the remaining measurements averaged.² So, if we equate "convenience" with discomfort, the 2 methodologies for providing out-of-office BP make distinctly different demands on the patient, and with ABPM there

is the added advantage of the nocturnal BP being available for analysis.

In my review, I made the plea that "rather than arguing for one technique over the other, both techniques . . . give differing information about BP behavior that may assist in understanding and managing hypertension," and they should be seen, therefore, as complimentary rather than competitive. Indeed, the technology is now available to enable manufacturers to provide us with "a device for all seasons"—an inexpensive monitor financially within the reach of the patient, as well as healthcare professionals, that will be able to record and analyze data in a standardized format according to the clinical requirement for a single BP measurement, repeated BP measurements at home or in the workplace, or BP measurement at predetermined intervals during the day and night over a 24- or 48-hour period.

Disclosures

The author has contributed financially to the development of the dabl ABPM software program and is a member of the Board of dabl Limited (www.dabl.ie).

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- Lee H-Y, Park JB. Prevalence and risk factors of masked hypertension identified by multiple self-blood pressure measurement. *Hypertension*. 2008;52:e137–e138.
- O'Brien E. Ambulatory blood pressure measurement: the case for implementation in primary care. *Hypertension*. 2008;51:1435–1441.
- Dolan E, Stanton A, Thijs L, Hinedi K, Atkins N, McClory S, Den Hond E, McCormack P, Staessen JA, O'Brien E. Superiority of ambulatory over clinic blood pressure measurement in predicting mortality: the Dublin Outcome Study. *Hypertension*. 2005;46:156–161.
- Krakoff LR. Cost-effectiveness of ambulatory BP: a reanalysis. Hypertension. 2006;47:29–34.