

# Ambulatory blood pressure measurement is indispensable to good clinical practice: a comment

The evidence for ambulatory blood pressure measurement (ABPM) as an indispensable investigation in clinical practice is now overwhelming. For years the argument against ABPM has been based on a lack of evidence showing the technique was superior to conventional measurement in predicting outcome. There is now ample evidence from longitudinal studies that ABPM is a much stronger predictor of cardiovascular morbidity and mortality than conventional measurement.<sup>1</sup> Moreover, though the relevance of nocturnal hypertension has been a controversial topic, recent evidence has shown that a non-dipping nocturnal pattern is a strong independent risk for cardiovascular mortality.<sup>2,3</sup> It has also been shown that absence of nocturnal 'dipping' of blood pressure (BP) to lower levels than during the day is associated with target organ involvement, and may be a useful (though non-specific) clue as to the presence of secondary hypertension.<sup>4</sup>

Another argument against the acceptance of ABPM in routine clinical practice, particularly in the US, has been the fear that the technique would be abused and therefore impose an intolerable financial burden on healthcare costs. The technique is, however, now reimbursed in the US by the Centers for Medicare and Medicaid Services (CMS).<sup>5</sup>

In addition, a number of national societies, acknowledging the increasing clinical use of ABPM have published recommendations for the use and interpretation of the technique in clinical practice;<sup>4,6,7</sup> and the European Society of Hypertension has also published recommendations on blood pressure-measuring devices, including devices for ABPM.<sup>8</sup>

Quite apart from the superiority of ABPM over conventional measurement in predicting outcome, the technique possesses many advantages that clinicians familiar with the technique have long recognised. By providing a large number of BP measurements over a period of time – usually the 24-hour period – which can be plotted to give a profile of BP behaviour, ABPM has allowed for a number of phenomena in hypertension to be more clearly identified than is possible with other methods of BP measurement.<sup>9,10</sup> Ahmed and colleagues (see pages 105-09) add to the clinical application of the technique by showing that treatment was modified in more than half of a cohort of patients with uncontrolled or variable BP after ABPM, with the overall consequence of reducing treatment.<sup>11</sup> This evidence is in keeping with the findings from a well-controlled study by Staessen and coworkers, who showed that adjustment of antihyperten-



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sive treatment based on either ABPM or conventional BP monitoring resulted in less intensive drug treatment in the ABPM group despite comparable BP control in both groups. Importantly, patients in the ABPM group who received less drug treatment were not disadvantaged as judged by left ventricular mass on echocardiography.<sup>12</sup>

It would seem that there is now international acceptance that ABPM is an indispensable investigation in patients with established and suspected hypertension and that it should be available to all patients diagnosed as having hypertension.

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## References

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