What’s new in blood pressure measurement? A workshop of the European Society of Hypertension

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A workshop on what’s new in blood pressure measurement was held in Paris in June 2004 at the 14th European Meeting on Hypertension of the European Society of Hypertension. Since its foundation in 1999, the Working Group has held annual workshops devoted to blood pressure measurement and Blood Pressure Monitoring has published over 80 papers from the proceedings of these workshops. These papers and those published in this issue reflect the underlying ethos of the Working Group, which is that accurate and informative measurement is mandatory for the diagnosis and management of hypertension and for research into hypertension. If the measurement of blood pressure is inaccurate it follows that all other considerations, be they related to patient management or scientific enquiry, must be inappropriate and erroneous.

Observing that the many guidelines for the management of hypertension largely ignore the information obtained with automated devices used for self and 24-h ambulatory blood pressure measurement (ABPM), Martin Myers, (Toronto, Canada) proposes a new algorithm incorporating automated measurements for use in patients with uncomplicated essential hypertension [1].

Paul Padfield and colleagues (Edinburgh, Scotland) present evidence that a direct access service for ABPM for general practitioners in Edinburgh has significantly influenced the management of patients most notably by a 20% reduction in the number of patients treated with antihypertensive drugs that would result in a financial saving more than adequate to pay for the technology needed for ABPM [2].

George Stergiou et al. (Athens, Greece) reviewing the evidence for blood pressure measurement in children and adolescents, concludes that ABPM is already finding a role as a supplementary source of information in children and adolescents, whereas at present home measurements should not be used for decision-making in this population [3].

Paolo Palatini (Padova, Italy) remarking that prevalence of masked hypertension in the general population may range from a low of 8% to a high of 49%, and that ABPM is a prerequisite for its diagnosis, explores the characteristics of the condition that might assist in identifying individuals for 24-h ABPM [4].

In 4939 treated hypertensive patients in the SHEAF study the prevalence of masked hypertension varied from 8.9–12.1% depending on the number of measurements made, and Jean-Michel Mallion and colleagues (Grenoble, France) shows data suggesting that for office measurement at least three measurements at two visits and for home measurement three measurements twice a day over 2 days are required to diagnose the condition [5].

Eamon Dolan et al. (Dublin, Ireland) presenting data from 5714 patients referred over a 22-year period with an overall prevalence of white-coat hypertension of 15.4%, shows that older adults, females, and cigarette smokers are more likely to have the phenomenon [6].

Elly Den Hond and colleagues (Leuven, Belgium) using data from the THOP Trial in which 400 hypertensive patients had blood pressure-lowering therapy adjusted on the basis of the self-measured pressure at home or conventional measurement measured at the doctor’s office, shows that therapy guided by home blood pressure led to less intensive drug treatment and marginally lower costs, but also to less blood pressure control [7].

Takayoshi Ohkubo et al. (Sendai, Japan) presents evidence from the Ohasama study to show that home blood pressure is an independent predictor for haemorrhagic and ischaemic stroke in the general population compared to conventional blood pressure [8].

Thomas Mengden and colleagues (Bonn, Germany) using telemonitoring of self-measurement of blood pressure in a trial of olmesartan medoxomil shows that the technique allows for the early identification of responders and demonstrates that olmesartan provides effective and reliable blood pressure lowering throughout the 24-h period [9].
References