Masked Hypertension Guidelines Found Lacking

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NEW YORK — Guidelines for detecting masked hypertension in adults should by changed to account for pre-existing conditions such as diabetes and kidney disease, Dr. Robert A. Phillips said at the meeting.

"Masked hypertension isn't adequately addressed by current guidelines," said Dr. Phillips, director of the Heart and Vascular Center of Excellence and professor of medicine at the University of Massachusetts, Worcester. "We're only beginning to understand how prevalent it is, and how dangerous."

He reviewed a host of studies indicating that recent recommendations for when to use home and ambulatory blood pressure monitoring (ABPM) would miss the majority of those affected (J. Am. Soc. Hypertens. 2008;2:119-24). Rather than selecting those with borderline hypertension for ambulatory monitoring, he urged hypertension specialists to focus on other risk factors supported by a growing body of evidence: smoking, diabetes, chronic kidney disease, left ventricular hypertrophy, microalbuminuria, and obstructive sleep apnea.

Support for the view that borderline blood pressure is a red herring—not a red flag—in the case of masked hypertension was found in a study presented at ASH. Fourteen percent of children aged 5-15 whose BP readings were normal when measured at a hypertension referral clinic nevertheless met diagnostic criteria for masked hypertension when assessed by ABPM, a Brazilian researcher reported.

The study involved 99 children who had been referred to have their BP eval-

uated at a pediatric hypertension clinic at the Federal University of Goiás in Brazil. Of these, 17 were diagnosed in the clinic as having an office BP higher than the 95th percentile. The remaining 82 subjects were all assessed by ABPM.

None of the 12 children who had previously been found to have borderline high BP in the office (greater than 90th but less than 95th percentile) showed evidence of masked hypertension according to the ABPM. But 10 of the 70 children who had normal BP during the office visit had masked hypertension.

The critical factors associated with increased risk of masked hypertension were in the children's parents—not in the children themselves. Children of hypertensive parents had a 4.3-fold increased risk of masked hypertension compared with children whose parents had normal BP. Children whose parents had a waist-to-hip ratio of at least 0.9 had a ninefold increased risk of masked hypertension, compared with those whose parents did not have abdominal obesity.

"When children are referred to you for possible hypertension, and their parents have these characteristics, you should consider assessing them for masked hypertension," said the study's lead author, Dr. Claudia Maria Salgado of Federal University of Goiás's department of pediatrics and hypertension league.

The 2008 recommendations suggest the use of self-measurement home BP or ABPM when patients' office BP is greater than 125/75 but less than 135/85 mm Hg. But Dr. Phillips said that following those recommendations will fail to identify many of the patients at risk for the condition. Patients with type 2 diabetes who have normal BP during office visits are 1.6 times more likely to have masked hypertension than are patients without diabetes (Arch. Intern. Med. 2007;167:2139-42).

He proposed new guidelines: Patients with one of the risk factors for masked hypertension should conduct self-measurements of BP at home. Those with self-monitored BP of at least 135/85 mm Hg should have their drug treatment intensified; those with a BP of less than 125/75 mm Hg should be considered normal; and those between the two poles should be assessed by ABPM.

In those diagnosed as having masked hypertension, Dr. Phillips urged physicians to treat them by lowering nocturnal BP. ■