Missed Diagnosis of Masked Hypertension: Need to Treat!

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Masked hypertension is defined as a normal blood pressure (BP) in the clinic or office (<140/90 mmHg), but an elevated BP out of the clinic (ambulatory daytime BP or home BP>135/85 mmHg). It may occur in as many as 10% of the general population, and it replaced the rather inappropriate term 'reverse white-coat hypertension' and 'white-coat normotension'; thus drawing attention to the fact that these patients are genuinely hypertensive by ambulatory BP but were missed by normal office BP. Masked hypertension is important because it is not diagnosed by routine medical examinations, but carries an adverse prognosis, both in terms of increased target organ damage and cardiovascular events. Masked hypertension is a true continuum of sustained hypertension rather than an aberrant measurement artifact. In addition, there might be an important role of psychosocial factors as a potential mechanism for the development of masked hypertension. In this regard, masked hypertension explained as a conditioned response to anxiety in office settings, and highlighted the role that diagnostic labeling plays in its development. Possible characteristics of individuals with masked hypertension are: relatively young age, male sex, stress or increased physical activity during the daytime, and smoking or drinking habits. Masked hypertension has also been described in treated hypertensive patients (in whom the prognosis is worse than predicted from the clinic pressure) and in children, in whom it may be a precursor of sustained hypertension. It may be suspected in individuals who have a history of occasional high BP readings, but who are apparently normotensive when checked in the office. One practical point is that we should continue to follow such people rather than dismissing them, and encourage out-of-clinic monitoring of BP. This would apply particularly to smokers and those with BP in the prehypertensive range. Because masked hypertension might be that of a continuum from prehypertension (based on office BP measurement) to masked hypertension (based on ambulatory

BP) and finally to sustained hypertension (based on both office and ambulatory BP), prehypertensive patients may progress to masked hypertension. Subsequently, patients who are prehypertensive should be screened for masked hypertension and treated. The potential implications of masked hypertension are huge, but the optimal strategy for detecting the condition in the general population is not yet clear.