

Managing Hypertension in Primary Care Practice: What's New And What Needs to Change

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This presentation will address five recent developments which are relevant to the management of hypertension in primary care.

1. How should blood pressure be measured?

Hypertension has traditionally been managed almost exclusively on the basis of measurements taken by doctors during an office visit. There is increasing recognition that these measurements give a poor representation of a patient's true blood pressure, for several reasons: the small number of readings taken, coupled with the inherent variability of blood pressure; the white coat effect; and poor technique. A major trend is the growth in the use of out-of-office blood pressure monitoring, using both home (self) monitoring, and 24 hour ambulatory monitoring. These two techniques have shown that prediction of cardiovascular risk is better than with office readings; that office readings can significantly under- and over-estimate the true blood pressure (masked and white coat hypertension); and that the response to antihypertensive treatment can be better evaluated than with office readings. Ambulatory monitoring is particularly useful for the initial diagnosis of hypertension, and home monitoring should become routine for evaluating changes of blood pressure over time. It may also improve patient compliance.

2. Which component of blood pressure is most important?

A high diastolic pressure was for many years thought to be the most important component of the blood pressure wave. We now know that it is important up to the age of about 50, but in older people systolic pressure is more important, and when systolic pressure is very high, increased risk may be related to a low diastolic pressure. It has been argued that a high pulse pressure may be the best predictor in the elderly, but in practical terms has no advantage over systolic pressure. Measures of arterial stiffness and central aortic pressure are becoming very popular, but are not yet applicable for routine practice.

3. The importance of sleep apnea

The worldwide epidemic of obesity and the metabolic syndrome is associated with an increasing prevalence of refractory hypertension. Many of these patients have unrecognized sleep apnea, which is a potentially reversible cause of hypertension in younger and middle-aged patients, but is not related to systolic hypertension of the elderly. Sleep apnea should be suspected in patients who are hypertensive and overweight.

4. Overcoming therapeutic inertia

Blood pressure control rates are universally poor, despite the availability of powerful antihypertensive drugs. While it has been convenient to blame patients for failing to take their medications, there is increasing recognition that physicians are often failing to prescribe additional medications or increasing doses when the blood pressure is high (therapeutic inertia). This can be overcome by greater use of combination drugs and more aggressive titration of doses.

5. The declining use of beta blockers

Although there is general consensus that the reduction of blood pressure is more important than which medications are used to lower it, analyses of studies in which beta blockers have been used as the primary antihypertensive drugs have indicated that for the same reduction of blood pressure they are less effective at preventing cardiovascular events than other classes of drugs. One reason for this may be that they are less effective at lowering the central aortic pressure. They are no longer recommended as first line agents.