

Assessment and Treatment of Hypertension in Adult

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Description

Based on clinic blood pressure, the diagnostic limit for hypertension remains 140/90 mmHg (BP). The recommendation that diagnosis be based on outside measurement continues to be supported by the risk of white-coat hypertension, which is defined as a difference between clinic readings and typical daytime home or ambulatory measurements of >20/10 mmHg. Home blood pressure monitoring (HBPM) is offered in place of ambulatory blood pressure monitoring (ABPM), which is the gold standard because not everyone is comfortable with it or can tolerate it. For HBPM, patients should be instructed to take at least two recordings twice daily for four to seven days, one minute apart. The results from the first day should be ignored and the mean of the remaining measurements should be used. ABPM may be required to confirm the diagnosis if the mean blood pressure is close to the diagnostic threshold, particularly in younger individuals (those under the age of 60), where the implications of a new hypertension diagnosis may be more important [1]. The diagnostic cutoff for ABPM or HBPM remains 135/85 mmHg. Standing blood pressure should be taken for people under the age of 80 who have symptoms of postural hypotension and type 2 diabetics. The subject's standing blood pressure should be checked after they have stood for at least one minute. When there is a significant postural drop in systolic blood pressure (>20 mmHg) [2], treatment should focus on raising standing blood pressure.

Since a significant difference in readings between the arms is a key indicator of vascular disease and can result in undertreatment, blood pressure tests should be performed in both arms when diagnosing. In response, NICE changed its definition of a significant difference between arms from 20 mmHg to 15 mmHg. Higher BP should be regularly monitored in the arm for follow-up monitoring whenever possible. It is only advised to seek immediate admission for BP assessment or control in patients with stage 3 hypertension (BP >180/120 mmHg) who also exhibit symptoms of acute end organ damage, such as papilloedema or retinal haemorrhage, or life-threatening symptoms, such as acute chest pain, confusion, or decompensated heart failure. In addition, immediate admission is recommended if significant hypertension and symptoms such as headache, abdominal pain, pallor, and nuchal diaphoresis suggest pheochromocytoma. A cardiovascular risk score (for example, using the most recent version of the QRISK score for patients residing in the UK) and tests to check for damage to target organs (fundoscopy, urinalysis, renal function, and ECG) should be offered to patients who have just received a diagnosis of hypertension [3]. It is now recommended that patients under the age of 80 with stage 1 hypertension, target organ damage, renal disease, cardiovascular disease, or diabetes seek treatment. This brings the statin risk threshold and the treatment risk threshold for hypertension into line. According to a brand-new cost-effectiveness analysis, starting therapy at the 10% threshold resulted in an incremental cost-effectiveness ratio of 10,000 GBP at the age of 60, making it regarded as cost-effective, which resulted in the risk threshold being reduced from 20%. NICE recommends considering

treatment for patients diagnosed before the age of 60 where the QRISK is 10%, based on shared decision-making and patient preference, given that risk calculators frequently underestimate lifetime cardiovascular risk in these younger people. Patients under the age of 60 may also benefit financially from treatment at a 5% risk threshold [4].

As a result of the advice, the majority of people with stage 1 hypertension who are between the ages of 60 and 80 will now be eligible for treatment. In the United Kingdom, approximately 50% of people with uncomplicated stage 1 hypertension are already taking BP-lowering medications, and many of these people are at risk for 10% of the disease. This suggests that healthcare providers might not have to do much more work as a result of changing the treatment approach. There is a lack of information regarding treatment goals for patients over the age of 80, and the risks associated with therapy are higher in this age group. The treatment threshold for the groundbreaking HyVET trial was 150 mmHg systolic blood pressure. As a result, when deciding whether to prescribe medication, especially to treat blood pressure below 150 mmHg, NICE advises doctors to consider factors like frailty and other comorbidities [5]. It is essential to note that the diagnostic and therapeutic thresholds have been adjusted to be consistent with those for individuals without diabetes now that hypertension in diabetic patients is covered by the guideline. In terms of both fatal and non-fatal major cardiovascular events, the ACCORD study found that treating people with type 2 diabetes to a target systolic blood pressure of 120 mmHg rather than 140 mmHg had no effect. Patients under the age of 80 should have their clinic blood pressure reduced to less than 140/90 mmHg or 135/85 mmHg if they are using HBPM for treatment. Due to a lack of primary prevention-related research and the increased risk it entails, such as falls and electrolyte imbalance, NICE does not advocate striving for blood pressure targets, which is in contrast to current recommendations from the United States and Europe.

Acknowledgement

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Conflict of Interest

None.

References

1. Clark, Christopher E, Rod S. Taylor, Angela C. Shore and John L. Campbell. "The difference in blood pressure readings between arms and survival: primary care cohort study." *Bmj* 344 (2012).
2. Brunström, Mattias and Bo Carlberg. "Association of blood pressure lowering with mortality and cardiovascular disease across blood pressure levels: a systematic review and meta-analysis." *JAMA Intern Med* 178 (2018): 28-36.
3. Sheppard, James P, Sarah Stevens, Richard J. Stevens and Richard J. McManus, et al. "Association of guideline and policy changes with incidence of lifestyle advice and treatment for uncomplicated mild hypertension in primary care: a longitudinal cohort study in the Clinical Practice Research Datalink." *Bmj open* 8 (2018): e021827.
4. Beckett, Nigel, Ruth Peters, Jaakko Tuomilehto and Terry McCormack, et al. "Immediate and late benefits of treating very elderly people with hypertension: results from active treatment extension to Hypertension in the Very Elderly randomised controlled trial." *Bmj* 344 (2012).

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5. ACCORD Study Group. "Effects of intensive blood-pressure control in type 2 diabetes mellitus." *N Engl J Med* 362 (2010): 1575-1585.

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