Letter to the Editor

Are General Blood Pressure Targets Still Valid?

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Classically, blood pressure (BP) targets were <140/90 mmHg for the general population and <130/80 mmHg for diabetics.[1] However, in recent years there has been increasing concern about the possibility of intense BP reduction being harmful for some patients. Since in the general population it was observed that, throughout middle and old age, the usual BP was strongly and directly related to vascular (and overall) mortality, without any evidence of a threshold down to at least 115/75 mm Hg,[2] it was assumed that reducing BP to those levels would be safe for everybody. However, neither vascular function nor hemodynamic properties are the same for treated and well controlled hypertensive patients as they are for subjects without hypertension. Moreover, data concerning intensive BP reduction for some subgroups of patients are lacking, and when such data have been published, such as for diabetics, it has transpired that attaining strict BP goals when compared to a non-strict control is not beneficial.[3]

The HYVET trial demonstrated that in hypertensive patients who were ≥80 years old, a target of systolic BP <150 mmHg markedly reduced cardiovascular events.[4] But it was not known what happened with lower goals, particularly in special groups such as those with ischemic heart disease—a common entity in the elderly population.[5] In INVEST, which included hypertensive patients with coronary artery disease, the systolic BP at the hazard ratio nadir increased with increasing age, being highest for the very old (140 mmHg), while diastolic BP at the hazard ratio nadir was only somewhat lower for the very old (70 mmHg).[6] These data suggest that these goals should be the target in very old hypertensive patients.

In conclusion, recommending general BP goals for every hypertensive patient may not be beneficial, but efforts should be made to ascertain which BP targets should be used in each subgroup of patients.

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