

Orthostatic Hypotension and Cardiovascular Death in Older Patients

To the Editor:

Orthostatic hypotension (OH) is broadly characterized by decreases in blood pressure of at least 20/10 mmHg after a person stands up. It is associated with structural or functional autonomic dysfunction in the cardiovascular responsive systems and a consequent failure to accommodate decreased vascular resistance.¹ As many as 30% of people older than 70 years are affected; however, even more may have unrecognized OH or have nonspecific symptoms that lead to misdiagnosis.¹

As people age, progressively harmful changes in the central and peripheral blood vessels can cause conditions such as neurologic or autoimmune diseases, hypertension, heart failure, diabetes, renal dysfunction, Parkinson disease, and cancer. These can increase the risk of OH. Other contributing factors include cardiac structural and functional alteration, left ventricular hypertrophy, increased levels of circulating inflammatory markers, increased intima-media width, subclinical atherosclerosis, and thrombosis.² Syncope, stroke, cardiovascular disease, and early death are associated with OH. Medications such as vasodilators, diuretics, and tricyclic antidepressants can contribute to the condition,³ as can vitamin B₁₂ deficiency.⁴ In older people with hypertension, OH is a significant risk factor for falls.⁵ The presence of OH is associated with higher all-cause mortality rates that are perhaps also influenced by conventional risk factors.⁶

We recommend that cardiologists investigate OH in older patients because of its prognostic importance. Health authorities, especially in developing countries, should encourage doctors to evaluate OH during general diagnosis and treatment of cardiovascular conditions. We hope to study the relationship between the frequency of OH episodes and mortality rates in elderly people who have cardiovascular diseases; the results may help us to develop guidelines for managing OH before it worsens in such cases.

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