

In Hypertension

Does Orthostatic Hypertension in Young Adults Predict Major Cardiac Events?

A sudden drop in BP when standing is a common and concerning problem in elderly hypertensive people. Now, research suggests a large BP swing in the opposite direction on standing may be equally concerning in younger hypertensive people.

Young and middle-aged adults with a systolic blood pressure (SBP) response to standing > 6.5 mm Hg had almost double the risk for MACE during follow-up compared with other participants.

An exaggerated BP response remained an independent predictor of MACE, even after adjusting for traditional risk factors, including 24-hour BP, the study showed.

"The clinical implication is important because now doctors measure [BP] in young people in the upright posture, but what we say is it must be measured also while standing," said Paolo Palatini, MD, a professor of internal medicine at the University of Padova, Italy, who led the study.

Previous studies have found that an exaggerated BP response to standing is a predictor of future hypertension, CV events, and mortality particularly in older patients, but few prognostic data exist in persons who are young to middle age

Clinical implication

- Exaggerated SBP response to standing in young hypertensive adults independently predicts MACE during follow-up.
- Orthostatic BP testing is easily performed in clinical settings and offers prognostic information beyond ambulatory BP monitoring.
- Implications for the Healthcare Team: Hyper-reactors should be treated based on the average of their supine and standing pressure.

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