Vitamin D supplementation does not appear to reduce blood pressure in patients with hypertension

August 12 2013

Vitamin D supplementation does not appear to improve blood pressure or markers of vascular health in older patients with isolated systolic hypertension (a common type of high blood pressure), according to a study by Miles D. Witham, Ph.D., of the University of Dundee, Scotland, United Kingdom, and colleagues.

A total of 159 patients (average age 77 years) with isolated systolic hypertension participated in the randomized clinical trial. Patients were randomly assigned to either the vitamin D group or the matching placebo group, and received supplementation every three months for one year. Researchers measured difference in office blood pressure, 24-hour blood pressure, arterial stiffness, endothelial function, cholesterol level, insulin resistance, and b-type natriuretic peptide level during the 12 month study period.

No significant treatment effect was seen for average office blood pressure, and no significant treatment effect was evident for any of the secondary outcomes (24-hour blood pressure, arterial stiffness, endothelial function, cholesterol level, glucose level, and walking distance), according to study results.

"It is still possible, however, that vitamin D supplementation could have beneficial effects on cardiovascular health via non-blood pressure effects, and ongoing large randomized trials are due to report on this in

the next few years," the study concludes.

More information: *JAMA Intern Med*. Published online August 12, 2013. DOI: 10.1001/jamainternmed.2013.9043