Does intensive blood pressure control reduce dementia?

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Intensive lowering of blood pressure did not significantly reduce dementia risk but did have a measurable impact on mild cognitive impairment (MCI), according to the final, peer-reviewed results from the Systolic Blood Pressure Intervention Trial (SPRINT) Memory and Cognition in Decreased Hypertension (SPRINT MIND). SPRINT MIND secondary results are the first to show an intervention that significantly reduces the occurrence of MCI, which is a well-established precursor of dementia. The results were reported Jan. 28, 2019 in the *Journal of the American Medical Association*. SPRINT MIND was an integral aspect of the initial design for SPRINT, a large, randomized clinical trial of intensive blood pressure lowering on cardiovascular and renal disease; both were funded by the National Institutes of Health.

"Dementia continues to be a large public health challenge, and based on the primary results of this study, we still have yet to find an intervention strategy proven to reduce the risk of dementia," said Richard J. Hodes, M.D., director of the National Institute on Aging (NIA), part of NIH and the lead institute on Alzheimer's research. "Nevertheless, the secondary results showing that intensive lowering of blood pressure may reduce risk for MCI, a known risk factor for dementia, gives us additional avenues to explore on the path to prevention."

MCI is a condition in which people have more difficulty with cognition, thinking, remembering, and reasoning, than normal for people their age. Dementia is a more severe form of loss in cognitive functions that interferes with daily life. Alzheimer's disease is the most common type of dementia. High blood pressure, or hypertension, is very common in persons over the age of 50 and a leading risk factor for heart disease, stroke, kidney failure, and a growing body of research suggests that it may increase risk for dementia later in life.

The participants in SPRINT were adults 50 years and older at high risk for cardiovascular disease. Results of the SPRINT trial, which ended early, showed that intensive blood pressure control, i.e., a systolic blood pressure target of less than 120 mmHg (