

## Associations Between Blood Pressure and Cognitive Decline

*Long-term elevated blood pressure was responsible for greater cognitive decline in black Americans than in white Americans.*

Black people, on average, experience earlier onset of elevated blood pressure (BP) and poorer control of BP throughout life than do white people. To establish whether blood pressure is associated with the observed earlier onset of cognitive impairment and faster decline in cognition in black patients, investigators performed a pooled cohort study of almost 20,000 patients (median age at study entry, 55; 20% black [self-reported]). Patients were drawn from five major U.S. population-based cardiovascular risk studies that included measures of BP and cognition. Previous stroke or dementia was an exclusion criterion. Patients were followed for a median 12.4 years.

Cumulative mean systolic BP (SBP) for black patients was about 4 mm Hg higher than that for white patients. Cumulative SBP was associated with cognitive decline in both groups, but black patients had earlier onset of cognitive loss (mean, 2.5 to 4 years sooner) and an associated steeper mean decline in cognitive function. However, adjustment for cumulative mean SBP attenuated the difference in decline of cognitive function between black and white patients. A similar pattern was seen for memory loss.

### COMMENT

These results have public health implications, with higher cumulative BP levels associated with earlier onset of cognitive decline in black people; the extent to which genetic, environmental, and socioeconomic factors account for these blood pressure differences is unclear. However, the results also offer another important motivation for clinicians to identify and treat all patients with hypertension.

— **Thomas L. Schwenk, MD**

Dr. Schwenk is board-certified in Family Medicine and Sports Medicine and is Dean of the University of Nevada School of Medicine

*Levine DA et al. Association between blood pressure and later-life cognition among black and white individuals. JAMA Neurol 2020 Apr 13; [e-pub]. (<https://doi.org/10.1001/jamaneurol.2020.0568>)*