RESEARCH PROVIDES INSIGHTS ON THE LINK BETWEEN KIDNEY DAMAGE AND COGNITIVE IMPAIRMENT

Highlights

- Kidney damage was linked with worse performance on tests of global cognitive function, executive function, memory, and attention.
- Kidney damage may also be linked with structural abnormalities in the brain.
- Research that uncovered these findings will be presented at ASN Kidney Week 2016 November 15–20 at McCormick Place in Chicago, IL.

Chicago, IL (November 17, 2016) — People with kidney disease are at high risk of cognitive impairment, but the nature of this relationship remains uncertain. A new analysis that investigates this link will be presented at ASN Kidney Week 2016 November 15–20 at McCormick Place in Chicago, IL.

For the analysis, Daniel Weiner, MD, FASN (Tufts Medical Center) and his colleagues gathered information from the Systolic Blood Pressure INTervention (SPRINT) cognition substudy, SPRINT-MIND. Among 9361 SPRINT-MIND participants, 2800 were administered an expanded cognitive battery at the start of the study and 2707 had complete data; 637 also had brain imaging.

After adjusting for various demographic and clinical characteristics, higher albumin in the urine, which is indicative of poor kidney function, was linked with worse performance on tests of global cognitive function, executive function, memory, and attention. Each doubling of the amount of albumin in the urine was akin to the effect of 6 to 14 months of aging in these cognitive domains. Lower estimated glomerular filtration rate, another indicator of poor kidney function, was linked with worse performance on tests of global cognitive function and memory. In the subset of participants with brain imaging, higher albumin in the urine was associated with abnormal white matter regions in the brain.

“The findings cement the association between kidney damage and cognitive functioning, suggesting that albumin in the urine and changes in brain structure are likely both representations of the same vascular process, just in different organs,” said Dr. Weiner. “This manifests with worse brain function, particularly in domains linked to
cerebrovascular disease. The fact that this comes from baseline data in the SPRINT trial suggests that these findings are likely relevant to tens of millions of US adults.”

Study: “Cognitive Function and Kidney Disease: Baseline Data from the SPRINT Trial” (Abstract 744)

ASN Kidney Week 2016, the largest nephrology meeting of its kind, will provide a forum for more than 13,000 professionals to discuss the latest findings in kidney health research and engage in educational sessions related to advances in the care of patients with kidney and related disorders. Kidney Week 2016 will take place November 15–20, 2015 in Chicago, IL.

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