LIVING KIDNEY DONORS FACE HIGHER RISK OF HYPERTENSION

Such post-donation hypertension may affect donors' kidney function.

Highlights
- Kidney donation was linked with a 19% higher risk of developing hypertension, and this association did not vary by race.
- Kidney function tended to improve after donation and then plateau if they developed hypertension.

Washington, DC (September 19, 2019) — Compared with non-donors, living kidney donors face a higher risk of developing hypertension, which may have negative effects on their kidney function. The findings, which appear in an upcoming issue of CJASN, indicate the importance of preventing and managing hypertension in individuals who are kidney donors.

Living kidney donation is linked with a higher risk of developing kidney failure, perhaps in part due to hypertension. To examine the risk of hypertension after donation and the potential impact of such post-donation hypertension on subsequent kidney function, Dorry Segev, MD, PhD (Johns Hopkins Medical Institutions) and his colleagues compared 1,295 living kidney donors with 8,233 healthy non-donors.

At 15 years, 8% of White non-donors, 9% of Black non-donors, 23% of White donors, and 42% of Black donors developed hypertension. Over a median follow-up of 6 years, kidney donation was linked with a 19% higher risk of developing hypertension, and this association did not vary by race.

White and Black non-donors tended to experience a decline in kidney function over time that steepened if they developed hypertension. For White and Black kidney donors, kidney function tended to improve after donation and then plateau if they developed hypertension.

“Further work is needed to identify opportunities and best practices for preventing, recognizing, and managing hypertension in living kidney donors,” the authors wrote.

In an accompanying editorial, William S. Asch MD, PhD (Yale University School of Medicine) noted that the findings have the potential to “shift the public and media’s
perception of the safety of living kidney donation, especially when coupled with the earlier reports already indicating an increased risk of end stage kidney disease in living donors."

Study co-authors include Courtenay Holscher, MD, Christine Haugen, MD, Kyle Jackson, MD, Jacqueline Garonzik Wang, MD, PhD, Madeleine Walfram, BA, Sunjae Bae, KMD, MPH, Jayme Locke, MD, MPH, Rhiannon Reed, MPH, Krista Lentine, MD, PhD, Gaurav Gupta, MD, Matthew Weir, MD, John Friedewald, MD, Jennifer Verbesesy, MD, Matthew Cooper, MD, and Allan Massie, PhD, MHS.

Disclosures: The authors reported no conflicts of interest.

The article, entitled “Self-Reported Incident Hypertension and Long-Term Kidney Function in Living Kidney Donors compared to Healthy Non-Donors,” will appear online at http://cjasn.asnjournals.org/ on September 19, 2019, doi: 10.2215/CJN.04020419.


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Facebook: Compared with non-donors, living kidney donors face a higher risk of developing hypertension, which may have negative effects on their kidney function. The findings, which appear in CJASN, indicate the importance of preventing and managing hypertension in individuals who are kidney donors.