DID HAVING KIDNEY DISEASE AND OTHER CONDITIONS AFFECT COVID-19 OUTCOMES IN DIFFERENT WAVES OF THE PANDEMIC?

Highlights

- During 4 waves of the COVID-19 pandemic in New York City, the risk of severe COVID-19 was associated with pre-existing chronic kidney disease, as well as heart disease, diabetes, and hypertension.
- The risk of acute kidney injury after developing COVID-19 was also associated with various pre-existing medical conditions.
- Results from the study will be presented at ASN Kidney Week 2022 November 3–November 6.

Orlando (November 5, 2022) — Individuals with chronic kidney disease (CKD) are vulnerable to developing severe forms of COVID-19, and acute kidney injury is a common complication of COVID-19. A recent analysis examined the temporal effects of pre-existing CKD and other medical conditions on COVID-19 outcomes by waves throughout the pandemic. The findings will be presented at ASN Kidney Week 2022 November 3–November 6.

Investigators identified 64,246 COVID-19 cases during 4 waves at Columbia University Medical Center in New York City, with 8% being severe and 18% requiring hospitalization. Among the major findings:

- The risk of severe COVID-19 was associated with pre-existing CKD, heart disease, diabetes, and hypertension in most waves; and lung disease, obesity, and cancer in at least one wave.
- Acute kidney injury occurred in 49% of severe cases and 35% of hospitalized ones.
- The risk of acute kidney injury was associated with heart failure, obesity, diabetes, and cancer in most waves; and CKD, coronary artery disease, hypertension, and stroke in one or two waves.

“Pre-existing CKD was one of the most consistent clinical predictors of COVID-19 severity, complications, and poor outcomes across multiple pandemic waves,” said lead author Ning Shang, PhD. “Hospitals could include kidney function evaluation in patient
populations as part of consideration for planning treatments and evaluating hospital capacities during future pandemic waves" added co-author Krzysztof Kiryluk, MD.

Study: "Kidney Disease and COVID-19 Outcomes in the Temporal Analysis of Pandemic Waves"

ASN Kidney Week 2022, the largest nephrology meeting of its kind, will provide a forum for nephrologists and other kidney health professionals to discuss the latest findings in research and engage in educational sessions related to advances in the care of patients with kidney diseases and related disorders.

Since 1966, ASN has been leading the fight to prevent, treat, and cure kidney diseases throughout the world by educating health professionals and scientists, advancing research and innovation, communicating new knowledge, and advocating for the highest quality care for patients. ASN has more than 20,000 members representing 132 countries. For more information, visit www.asn-online.org and follow us on Facebook, Twitter, LinkedIn, and Instagram.

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