COMBINED TESTS CAN PREDICT KIDNEY INJURY RISK IN CRITICALLY ILL CHILDREN

Highlights

- Combining the Renal Angina Index and measurement of urinary Neutrophil Gelatinase Associated Lipocalin can improve predictions of severe acute kidney injury in critically ill children.
- Results from the study will be presented at ASN Kidney Week 2019 November 5–November 10 at the Walter E. Washington Convention Center in Washington, DC.

Washington, DC (November 10, 2019) — Combining 2 tests can improve predictions of severe acute kidney injury in children in intensive care. The findings come from a study that will be presented at ASN Kidney Week 2019 November 5–November 10 at the Walter E. Washington Convention Center in Washington, DC.

Two assessments—the Renal Angina Index (RAI) and measurement of urinary Neutrophil Gelatinase Associated Lipocalin (NGAL)—can be used to determine patients’ risk of developing severe acute kidney injury. Kelli Krallman (Cincinnati Children's Hospital Medical Center) and her colleagues looked to determine the potential benefits of combining these assessments.

The team’s analysis included 627 pediatric intensive care unit (PICU) admissions. The RAI calculated at 12 hours was found to be a significant predictor of the development of severe acute kidney injury during PICU days 2–4. Adding urinary NGAL assessments for those at risk based off a high RAI score improved the prediction significantly. These RAI+/NGAL+ patients were not only at higher risk for severe acute kidney injury, but also for the need of kidney replacement therapy such as dialysis, longer PICU stay, and longer hospital stay.

“Integration of the RAI and urinary NGAL assessments can be used early in the PICU course to identify patients truly at risk for acute kidney injury and its associated morbidity,” said Krallman.

Study: “Predicting Severe AKI, Fluid Overload, and Renal Replacement Therapy with the Renal Angina Index in Critically Ill Children”
ASN Kidney Week 2019, 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 2019 will take place November 5 – November 10 in Washington, DC.

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 131 countries. For more information, please visit www.asn-online.org or contact the society at 202-640-4660.

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