



The NKC's mission is to improve the health of newborns with or at risk for kidney disease through multidisciplinary collaborative research, advocacy, and education.

November 2021

Dear NKC Members,

We hope you all are enjoying fall and are gearing up for a safe and health holiday season. Check out the exciting updates from the NKC below!

November Article of the Month

The article of the month comes from one of the Six2Crew interns, Austin Rutledge (MUSC), who has reviewed the multicenter paper, 'Epidemiology of Acute Kidney Injury After Neonatal Cardiac Surgery: A Report From the Multicenter Neonatal and Pediatric Heart and Renal Outcomes Network.' He also included a comparison to single center results that were reviewed in the article of the month for August. Make sure to check out this excellent summary of the article at <https://www.babykidney.org/education/articles/nov2021>.

Education – Resource Library

Do you have PowerPoint slides and/or presentations related to neonatal kidney health that you would like to share with other NKC members? The NKC Education Committee invites you to submit material for the Members Only Resource Library, a collection of slides that can be downloaded and used by others who wish to disseminate information about neonatal kidney disease, the NKC, its mission, and its scholarly work.

Possible topics include (but are not limited to): acute kidney injury, findings from the AWAKEN study, AKI biomarkers, neonatal hypertension, dialysis, fluid balance and management, renal NIRS, and long-term outcomes/chronic kidney disease. Use of the material will require appropriate attribution to the original authors and the NKC resource library.

Please visit with the Resource Library section in the Education portal on the NKC website, <https://www.babykidney.org/education/resource-library>, or contact Dr. Alison Kent (alison_kent@urmc.rochester.edu) or Dr. Jennifer Jetton (Jennifer-jetton@uiowa.edu) with questions.

New AWAKEN Publications

Make sure to check out two recent AWAKEN publications by Dr. Nada and Dr. Basalely and colleagues. All of the AWAKEN publications can be found here:

<https://www.babykidney.org/accomplishments/publications>

“Association of early dysnatremia with mortality in the neonatal intensive care unit: results from the AWAKEN study”

Abby M Basalely, Russell Griffin, Katja M Gist, Ronnie Guillet, David J Askenazi, Jennifer R Charlton, David T Selewski, Mamta Fuloria, Frederick J Kaskel Kimberly J Reidy, AWAKEN Study Group. *J Perinatol* (2021), online first.



Dysnatremia developed in 50.2% of the cohort and was not associated with AKI. Mortality was associated with hyponatremia (HR 2.15, 95% CI 1.07-4.31), hypernatremia (HR 4.23, 95% CI 2.07-8.65), and combined hypo/hypernatremia (HR 6.39, 95% CI 2.01-14.01). In stratified models by AKI-status, hypernatremia and hypo/hypernatremia increased risk of mortality in neonates without AKI.

“Low albumin levels are independently associated with neonatal acute kidney injury: a report from AWAKEN Study Group”



Arwa Nada, David Askenazi, Juan C Kupferman, Maroun Mhanna, John D Mahan, Louis Boohaker, Linzi Li, Russell L Griffin. *Pediatr Nephrol*. 2021 Oct 18.

Low albumin levels were associated with increased odds of neonatal AKI; for every 0.1 g/dL decrease in albumin, the odds of late AKI increased by 12% on continuous analysis. After adjustment for potential confounders, neonates with albumin values in the lowest quartiles (< 2.2 g/dL) had an increased odds of early [Adjusted Odd Ratio (AdjOR) 2.5, 95% CI = 1.1-5.3, p < 0.03] and late AKI [AdjOR 13.4, 95% CI = 3.6-49.9, p < 0.0001] compared to those with albumin in the highest quartile (> 3.1 g/dL). Albumin levels of 2.6 g/dL and 2.4 g/dL best predicted early (AUC = 0.59) and late AKI (AUC = 0.64), respectively.

Updates from the NKC Board

This month the Board continued to discuss a draft of bylaws that we are looking to approve for the Neonatal Kidney Collaborative. This will take several months to work through as we want to make sure that we get it as right as possible on the first go around. Thanks to Dr. Askenazi on this effort.

Communicate your News and Event with the NKC!

Do you have an upcoming event or conference that you think the NKC membership would be interested in? How about a recent accomplishment that you'd like to share? Please let the Communication Committee know by filling out this [brief form](#)! We would be happy to help share or communicate your upcoming work or accomplishment.

Best Wishes,
Michelle Starr and Matthew Harer
NKC Communication Committee Co-Chairs

Paige Condit and Jacob Little
Six-2 Crew Communication Interns