May 2022 • Vol. 17 • No 5

Editorials

623 Treatment Options for Venous Thromboembolism in Patients Receiving Dialysis
Thomas A. Mavrakanas
See related article on page 693.

626 Functional Assessment of High-Risk APOL1 Genetic Variants
Cassianne Robinson-Cohen
See related article on page 684.

628 Learnings from Throwing Paint at the Wall for COVID-19 with an SGLT2 Inhibitor
Katherine R. Tuttle
See related article on page 643.

631 CRRT Fluid Choices: A Solution for a Common Problem?
Anitha Vijayan
See related article on page 634.

Original Articles

Acute Kidney Injury and ICU Nephrology

634 Association of Phosphate-Containing versus Phosphate-Free Solutions on Ventilator Days in Patients Requiring Continuous Kidney Replacement Therapy
See related editorial on page 631.

Chronic Kidney Disease

643 Dapagliflozin and Kidney Outcomes in Hospitalized Patients with COVID-19 Infection: An Analysis of the DARE-19 Randomized Controlled Trial
Hiddo J.L. Heerspink, Remo H.M. Furtado, Otavio Berwanger, Cary G. Koch, Felipe Martinez, Omar Mukhtar, Subodh Verma, Samvel B. Gasparyan, Fengming Tang, Sheryl L. Windsor, Vicente Cés de Souza-Dantas, Mildren del Sueldo, Robert Frankel, Ali Javaheri, Rafael A. Maldonado, Caryn Morse, Marco Mota-Gomes, Douglas Shemin, Osvaldo Lourenço Silva Jr., Alexandre Pereira Tognon, Marcel Twahirwa, Joan Buenconsejo, Russell Esterline, Jan Oscarsson, Philip Ambery, Anna Maria Langkilde, and Mikhail N. Kosiborod
See related editorial on page 628.

Clinical Nephrology

655 Provider Perspectives and Clinical Outcomes with Inpatient Telenephrology
Lagu A. Androga, Ziad Zaghiby, Priya Ramar, Rachel H. Amundson, Margaret d’Uscio, Lindsey M. Philpot, Bjoerg Thorsteinsdottir, Andrea G. Kattah, and Robert C. Albright, Jr.
On the Cover

What is the diagnosis?

A 66-year-old male with a history of low-grade lymphoplasmacytic lymphoma status post autologous stem cell transplant, hypertension, diabetes mellitus, and CKD stage 4 secondary to biopsy-proven AL amyloidosis and longstanding hydronephrosis secondary to retroperitoneal lymphadenopathy presented to the hospital with diarrhea and fatigue accompanied by decreased oral intake and cloudy urine output. He was found to have AKI with a serum creatinine of 5.0 mg/dl, sodium of 125 meq/L, and potassium of 6.3 meq/L.

Image Description:

Axial abdominal computerized tomography (left) shows extensive pararenal and retroperitoneal calcifications secondary to the patient’s known AL amyloidosis and lymphoma. There is cortical thinning of the right kidney from chronic atrophy and bilateral hydronephrosis. The kidney ultrasound (right) shows hydronephrosis of the right kidney that is atrophic from the lymphadenopathy. Both images depict the compressive effects of the lymphadenopathy.

Coronal abdominal computerized tomography shows parenchymal thinning of the kidney due to chronic obstruction and hydronephrosis. The coronal computerized tomography image shows retroperitoneal and para-aortic obstructive lymphadenopathy.

Teaching Points:

The patient had hemodynamic instability and sepsis from a urinary tract infection that was complicated by extensive calcifications causing compressive and obstructive uropathy. Ultimately, the patient underwent bilateral percutaneous nephrostomy to relieve the urinary obstruction. This case demonstrates that patients with diseases such as amyloidosis and lymphoma are susceptible to obstructive uropathy from compressive lymphadenopathy. Patients present with a variety of symptoms, including palpable mass, palpable bladder, flank pain, or anuria. Additionally, they can present with laboratory abnormality consistent with an obstructive renal tubular acidosis, such as nonanion gap metabolic acidosis with hyperkalemia. Treatment of an obstructive AKI requires relief of the obstruction either through ureteral stenting or percutaneous nephrostomy.

(Images and text provided by Samuel Aaron Lazoff, Bobak Shariﬁ, and Amanda Renaghan, University of Virginia, Nephrology, Charlottesville, Virginia)