Editorials

1 Temporal Trends in AKI: Insights from Big Data
Girish N. Nadkarni and Steven G. Coca
See related article on page 14.

4 Lupus Nephritis in the Era of Biomarkers
Jose Manuel Monroy Trujillo and Derek Michael Fine
See related article on page 47.

6 Tamm Horsfall Glycoprotein and Uromodulin: It Is All about the Tubules!
Anthony J. Bleyer and Stanislav Kmoch
See related article on pages 70 and 62.

9 Cocoa Flavanols: A Magic Potion for Protecting the Endothelium in Kidney Failure?
Carmine Zoccali and Francesca Mallamaci
See related article on page 108.

12 Waiting for a Deceased Kidney Donor Transplant: Better a Small Fish Than an Empty Dish?
Ann Young and Amit X. Garg
See related article on page 128.

Original Articles

Acute Kidney Injury

14 Exploring Potential Reasons for the Temporal Trend in Dialysis-Requiring AKI in the United States
Raymond K. Hsu, Charles E. McCulloch, Michael Heung, Rajiv Saran, Vahakn B. Shahinian, Meda E. Pavkov, Nilka Rios Burrows, Neil R. Powe, and Chi-yuan Hsu for the Centers for Disease Control and Prevention Chronic Kidney Disease Surveillance Team
See related editorial on page 1.

21 Follow-Up Renal Assessment of Injury Long-Term After Acute Kidney Injury (FRAIL-AKI)
David S. Cooper, Donna Claes, Stuart L. Goldstein, Michael R. Bennett, Qing Ma, Prasad Devarajan, and Catherine D. Krawczeski

30 Modality of RRT and Recovery of Kidney Function after AKI in Patients Surviving to Hospital Discharge
Kelly V. Liang, Florentina E. Sileanu, Gilles Clermont, Raghavan Murugan, Francis Pike, Paul M. Palevsky, and John A. Kellum

Chronic Kidney Disease

39 Evaluation of Neurocognition in Youth with CKD Using a Novel Computerized Neurocognitive Battery
Erum A. Hartung, Ji Young Kim, Nina Laney, Stephen R. Hooper, Jerilynn Radcliffe, Allison M. Port, Ruben C. Gur, and Susan L. Furth

Clinical Nephrology

47 Relationship of Circulating Anti-C3b and Anti-C1q IgG to Lupus Nephritis and Its Flare
See related editorial on page 4.
Clinical Nephrology (Continued)

54 Renal Scarring in the Randomized Intervention for Children with Vesicoureteral Reflux (RIVUR) Trial
Tej K. Mattoo, Russell W. Chesney, Saul P. Greenfield, Alejandro Hoberman, Ron Keren, Ranjiv Mathews, Lisa Gravens-Mueller, Anastasia Ivanova, Myra A. Carpenter, Marva Moxey-Mims, Massoud Majd, and Harvey A. Ziessman for the RIVUR Trial Investigators

62 Clinical, Genetic, and Urinary Factors Associated with Uromodulin Excretion
Stéphan Troyanov, Catherine Delmas-Frenette, Guillaume Bollée, Sonia Youhanna, Vanessa Bruat, Philip Awadalla, Olivier Devuyst, and François Madore
See related editorial on page 6.

Epidemiology and Outcomes

70 Associations of Urinary Uromodulin with Clinical Characteristics and Markers of Tubular Function in the General Population
Menno Pruijm, Belen Ponte, Daniel Ackermann, Fred Paccaud, Idris Guessous, Georg Ehret, Antoinette Pechère-Bertschi, Bruno Vogt, Markus G. Mohaupt, Pierre-Yves Martin, Sonia C. Youhanna, Nadine Nägele, Peter Vollenweider, Gérard Waebber, Michel Burnier, Olivier Devuyst, and Murielle Bochud
See related editorial on page 6.

81 Complete Remission in the Nephrotic Syndrome Study Network

90 Association between Serum Potassium and Outcomes in Patients with Reduced Kidney Function
Jiacong Luo, Steven M. Brunelli, Donna E. Jensen, and Alex Yang

101 Factors Associated with Recovery of Renal Function following Radical Nephrectomy for Kidney Neoplasms
Emily C. Zabor, Helena Furberg, Joseph Mashni, Byron Lee, Edgar A. Jaimies, and Paul Russo

ESRD and Chronic Dialysis

108 Vasculoprotective Effects of Dietary Cocoa Flavanols in Patients on Hemodialysis: A Double-Blind, Randomized, Placebo-Controlled Trial
Tienush Rassaf, Christos Rammos, Ulrike B. Hendgen-Cotta, Christian Heiss, Werner Kleophas, Frank Dellanna, Jürgen Floege, Gerd R. Hetzel, and Malte Kelm
See related editorial on page 9.

Nephrolithiasis

119 Predictors of Incident ESRD among Patients with Primary Hyperoxaluria Presenting Prior to Kidney Failure
Fang Zhao, Eric J. Bergstrahl, Ramila A. Mehta, Lisa E. Vaughan, Julie B. Olson, Barbara M. Seide, Alicia M. Meek, Andrea G. Cogal, John C. Lieske, and Dawn S. Milliner on behalf of the Investigators of the Rare Kidney Stone Consortium

Renal Transplantation

128 Mortality among Younger and Older Recipients of Kidney Transplants from Expanded Criteria Donors Compared with Standard Criteria Donors
Maggie K.M. Ma, Wai H. Lim, Jonathan C. Craig, Graeme R. Russ, Jeremy R. Chapman, and Germaine Wong
See related editorial on page 12.
On the Cover

What’s the diagnosis? A 30-year-old pregnant Caribbean woman presented to the hospital with sudden onset of edema in the first trimester. She had no significant medical history and had no family history of kidney disease. Her daughter was diagnosed with Fifth’s disease several weeks prior, and subsequently the patient was found to have acute parvovirus infection with positive IgM antibodies and a viral load. Her course was complicated by fetal demise, and nephrotic range proteinuric acute kidney injury with serum creatinine 6.3 mg/dl, serum albumin 1.5g/L, and 20 grams of proteinuria. She underwent a renal biopsy that revealed dilated microcystic tubules (cover image, left panel) and focal segmental glomerulosclerosis (cover image, right panel). These findings are typically seen with HIVAN (Human Immunodeficiency Virus Associated Nephropathy), but as suggested here, other viral illnesses may cause similar findings. Parvovirus infection has been associated with collapsing FSGS in the literature. Other lesions also described include a postinfectious GN, thrombotic microangiopathy and Henoch Scholein purpura. The patient developed thrombocytopenia and bone marrow failure from the parvovirus and was treated with IVIG. Her hematologic parameters improved, but her kidney disease progressed to ESRD over a few months and she was started on dialysis. (Image and text provided by Whitney Besse, MD, Nephrology Fellow, Yale; Sherry Mansour, MD, Nephrology Fellow, Yale; and Ursula C. Brewster, MD, Associate Professor of Medicine Yale School of Medicine)