Editorials

2025 The Effects of Frequent Hemodialysis on Left Ventricular Mass, Volumes, and Geometry
Rakesh K. Mishra and Ruth F. Dubin
See related article on page 2106

2028 Opportunities to Improve End-of-Life Care in ESRD
Jane O. Schell and Jean L. Holley
See related article on page 2117

2031 Financial Incentives for Living Kidney Donation: Ethics and Evidence
Matthew B. Allen and Peter P. Reese
See related article on page 2165

Original Articles

Acid/Base and Electrolyte Disorders

2034 Dietary Acid, Age, and Serum Bicarbonate Levels among Adults in the United States
Afolarin Amodu and Matthew K. Abramowitz

Acute Kidney Injury /Acute Renal Failure

2043 Association of Elevated Urinary Concentration of Renin-Angiotensin System Components and Severe AKI
Joseph L. Alge, Nithin Karakala, Benjamin A. Neely, Michael G. Janech, James A. Tumlin, Lakhmir S. Chawla, Andrew D. Shaw, and John M. Arthur, for the SAKnet Investigators

2053 Plasma NGAL for the Diagnosis of AKI in Patients Admitted from the Emergency Department Setting
Karina Soto, Ana Luisa Papoila, Silvia Coelho, Michael Bennett, Qing Ma, Bruno Rodrigues, Pedro Fidalgo, Francisca Frade, and Prasad Devarajan

Chronic Kidney Disease

2064 Metabolic Subtypes and Risk of Mortality in Normal Weight, Overweight, and Obese Individuals with CKD
Lynae J. Hanks, Rikki M. Tanner, Paul Muntner, Holly Kramer, William M. McClellan, David G. Warnock, Suzanne E. Judd, and Orlando M. Gutiérrez, on behalf of the REGARDS Investigators

Clinical Nephrology

2072 Treatment of Idiopathic FSGS with Adrenocorticotropic Hormone Gel

2082 Development and Validation of a Prediction Rule Using the Oxford Classification in IgA Nephropathy
Shigeru Tanaka, Toshiharu Ninomiya, Ritsuko Katauchi, Kosuke Masutani, Akihiro Tsuchimoto, Hideko Noguchi, Hideki Hirakata, Kazuhiko Tsuruya, and Takanari Kitazono

Epidemiology and Outcomes

2091 Kidney Function and Prevalent and Incident Frailty

2100 Left Atrial Diameter and Survival among Renal Allograft Recipients
ESRD and Chronic Dialysis

**2106 Effects of Frequent Hemodialysis on Ventricular Volumes and Left Ventricular Remodeling**
Christopher T. Chan, Tom Greene, Glenn M. Chertow, Alan S. Kliger, John B. Stokes, Gerald J. Beck, John T. Daugirdas, Peter Kotanko, Brett Larive, Nathan W. Levin, Ravindra L. Mehta, Michael Rocco, Javier Sanz, Phillip C. Yang, Sanjay Rajagopalan, and the Frequent Hemodialysis Network Trial Group
See related editorial on page 2025

**2117 Survival after Dialysis Discontinuation and Hospice Enrollment for ESRD**
Nina R. O’Connor, Meredith Dougherty, Pamela S. Harris, and David J. Casarett
See related editorial on page 2028

Health Services Research

**2123 Consideration of ICD-9 Code-Derived Disease-Specific Safety Indicators in CKD**
Iris R. Hartley, Jennifer S. Ginsberg, Clarissa J. Diamantidis, Min Zhan, Loreen Walker, Gail B. Rattinger, and Jeffrey C. Fink

Mineral Metabolism/Bone Disease

**2132 CKD–Mineral and Bone Disorder and Risk of Death and Cardiovascular Hospitalization in Patients on Hemodialysis**
Geoffrey A. Block, Ryan D. Kilpatrick, Kimberly A. Lowe, Wenli Wang, and Mark D. Danese

Renal Transplantation

**2141 The Clinical and Genomic Significance of Donor-Specific Antibody–Positive/C4d-Negative and Donor-Specific Antibody–Negative/C4d-Negative Transplant Glomerulopathy**
Nicole Hayde, Yi Bao, James Pullman, Bin Ye, R. Brent Calder, Monica Chung, Daniel Schwartz, Michelle Lubetzky, Maria Ajaimy, Graciela de Boccardo, and Enver Akalin

**2149 Differences in Access to Kidney Transplantation between Hispanic and Non-Hispanic Whites by Geographic Location in the United States**
Cristina M. Arce, Benjamin A. Goldstein, Aya A. Mitani, Colin R. Lenihan, and Wolfgang C. Winkelmayer

**2158 Racial and Socioeconomic Disparities in the Allocation of Expanded Criteria Donor Kidneys**
Rajesh Mohandas, Michael J. Casey, Robert L. Cook, Kenneth E. Lamb, Xuerong Wen, and Mark S. Segal

**2165 The Cost-Effectiveness of Using Payment to Increase Living Donor Kidneys for Transplantation**
Lianne Barnieh, John S. Gill, Scott Klarenbach, and Braden J. Manns
See related editorial on page 2031

Attending Rounds

**2174 A Patient with CKD and Poor Nutritional Status**
T. Alp Ikizler

Moving Points in Nephrology

**2183 Novel Paradigms for Dialysis Vascular Access: Introduction**
Michael Allon

Andrea Remuzzi and Bogdan Ene-Iordache

**2194 Novel Paradigms for Dialysis Vascular Access: Downstream Vascular Biology–Is There a Final Common Pathway?**
Timmy Lee

**2202 Novel Therapies for Hemodialysis Vascular Access Dysfunction: Myth or Reality?**
Christi M. Terry and Laura M. Dember
On the Cover

What’s the diagnosis? A 55-year-old man developed acute onset of left flank pain. Renal ultrasound and non-contrast computed tomography (CT) scan of the abdomen and pelvis were unremarkable. However, contrast-enhanced CT scan revealed left renal artery aneurysm and renal infarction. CT scan with reconstruction (upper panel) demonstrates the left renal artery aneurysm, while renal infarction is best seen on the non-reconstructed contrast CT scan (lower panel). The patient underwent renal angiogram with stent placement to exclude the aneurysm. On the inside cover just below the text are CT scan images with red arrows identifying the renal artery aneurysm and yellow arrows identifying the areas of infarction (upper left and right panels). The pre-stent angiogram has a red arrow identifying the aneurysm (lower left panel), while the post-stent angiogram has an arrow at the site of the excluded aneurysm (right lower panel).

Renal infarction is a complication that occurs primarily from thromboemboli originating from a cardiac or aortic aneurysm thrombus, and less commonly from an in-situ thrombus within the renal artery. Atrial fibrillation and endocarditis are common cardiac sources, while renal artery injury from spontaneous renal artery dissection, fibromuscular dysplasia, or Ehlers-Danlos syndrome with a thrombotic aneurysm is associated with renal thromboemboli. Renal infarction may develop when renal artery occlusion occurs following an aortic or renal endovascular intervention. It has been described with hypercoagulable states such as hyperhomocysteinemia, antiphospholipid syndrome, nephrotic syndrome, and hereditary thrombophilia. Finally, renal infarction also complicates classical polyarteritis nodosa and cocaine use. Renal infarction often manifests with acute onset of flank or generalized abdominal pain, along with nausea and vomiting. Hypertension commonly occurs. Laboratory abnormalities include leukocytosis, increased serum and urine LDH, and gross or microscopic hematuria. Contrast CT scan is diagnostic, but a radioisotope renogram can be used if contrast exposure is contraindicated. Therapy is directed at the underlying cause. In this case, renal artery stent placement to exclude the aneurysm and anticoagulation with heparin were employed. (Images and text provided by Mark A. Perazella, Yale University, New Haven, Connecticut)