# Editorials

1. **Do Health Outcomes Vary by Profit Status of Hemodialysis Units?**  
   Barry M. Straube  
   See related article on page 73

3. **Should Buttonhole Cannulation Be Discontinued?**  
   Louise M. Moist and Gihad E. Nesrallah  
   See related article on page 110

6. **Sexual Inactivity among Hemodialysis Patients: The Patients’ Perspective**  
   Fredric O. Finkelstein and Susan H. Finkelstein  
   See related article on page 128

8. **Generalizability of Genetic Findings Related to Kidney Function and Albuminuria**  
   Afshin Parsa and Barry I. Freedman  
   See related article on page 150

# Original Articles

## Acute Kidney Injury /Acute Renal Failure

12. **Incidence, Outcomes, and Comparisons across Definitions of AKI in Hospitalized Individuals**  
   Xiaoxi Zeng, Gearoid M. McMahon, Steven M. Brunelli, David W. Bates, and Sushrut S. Waikar

## Chronic Kidney Disease

29. **Recognition of CKD After the Introduction of Automated Reporting of Estimated GFR in the Veterans Health Administration**  

37. **Plasma and Urinary Amino Acid Metabolomic Profiling in Patients with Different Levels of Kidney Function**  
   Flore Duranton, Ulrika Lundin, Nathalie Gayrard, Harald Mischak, Michel Aparicio, Georges Mourad, Jean-Pierre Daurès, Klaus M. Weinberger, and Angel Argilés

## Clinical Immunology and Pathology

46. **C3 Glomerulopathy: Clinicopathologic Features and Predictors of Outcome**  

## Clinical Nephrology

54. **New Combined Serum Creatinine and Cystatin C Quadratic Formula for GFR Assessment in Children**  
   Hassib Chehade, Francois Cachat, Anne-Sophie Jannot, Blaise-Julien Meyrat, Dolores Mosig, Daniel Bardy, Paloma Parvex, and Eric Girardin
Diabetes and The Kidney

Change in Albuminuria and eGFR Following Insulin Sensitization Therapy Versus Insulin Provision Therapy in the BARI 2D Study
Phyllis August, Regina M. Hardison, Fadi G. Hage, Oscar C. Marroquin, Janet B. McGill, Yves Rosenberg, Michael Steffes, Barry M. Wall, and Mark Molitch, for the BARI 2D Study Group

Epidemiology and Outcomes

Comparison of Hospitalization Rates among For-Profit and Nonprofit Dialysis Facilities
Lorien S. Dalrymple, Kirsten L. Johansen, Patrick S. Romano, Glenn M. Chertow, Yi Mu, Julie H. Ishida, Barbara Grimes, George A. Kaysen, and Danh V. Nguyen
See related editorial on page 1

Near-Term Prediction of Sudden Cardiac Death in Older Hemodialysis Patients Using Electronic Health Records
Benjamin A. Goldstein, Tara I. Chang, Aya A. Mitani, Themistocles L. Assimes, and Wolfgang C. Winkelmayer

Adult Height in Patients with Advanced CKD Requiring Renal Replacement Therapy during Childhood

Dietary Phthalates and Low-Grade Albuminuria in US Children and Adolescents
Leonardo Trasande, Sheela Sathyanarayana, and Howard Trachtman

ESRD and Chronic Dialysis

Buttonhole Cannulation and Clinical Outcomes in a Home Hemodialysis Cohort and Systematic Review
Christopher A. Muir, Sradha S. Kotwal, Carmel M. Hawley, Kevan Polkinghorne, Martin P. Gallagher, Paul Snelling, and Meg J. Jardine
See related editorial on page 3

IGF-1 and Survival in ESRD
Ting Jia, Thiane Gama Axelsson, Olof Heimbürger, Peter Bárány, Bengt Lindholm, Peter Stenvinkel, and Abdul Rashid Qureshi

Sexual Function, Activity, and Satisfaction among Women Receiving Maintenance Hemodialysis
Maria K. Mor, Mary Ann Sevick, Anne Marie Shields, Jamie A. Green, Paul M. Palevsky, Robert M. Arnold, Michael J. Fine, and Steven D. Weisbord
See related editorial on page 6

Association between GFR Estimated by Multiple Methods at Dialysis Commencement and Patient Survival
Muh Geot Wong, Carol A. Pollock, Bruce A. Cooper, Pauline Branley, John F. Collins, Jonathan C. Craig, Joan Kesselhut, Grant Luxton, Andrew Pilmore, David C. Harris, and David W. Johnson

Pregnancy Outcomes According to Dialysis Commencing Before or After Conception in Women with ESRD
Shilpanjali Jesudason, Blair S. Grace, and Stephen P. McDonald

Genetics

Generalization of Associations of Kidney-Related Genetic Loci to American Indians
Nora Franceschini, Karin Haack, Laura Almasy, Sandra Laston, Elisa T. Lee, Lyle G. Best, Richard R. Fabsitz, Jean W. MacCluer, Barbara V. Howard, Jason G. Umans, and Shelley A. Cole
See related editorial on page 8

Nephrolithiasis

Body Fat Content and Distribution and Urinary Risk Factors for Nephrolithiasis
Federica Pigna, Khashayar Sakaee, Beverley Adams-Huet, and Naim M. Maalouf

Attending Rounds

Painful Skin Ulcers in a Hemodialysis Patient
Stuart M. Sprague
174 Dying on Dialysis: The Case for a Dignified Withdrawal
Rebecca J. Schmidt and Alvin H. Moss

181 Principles of Separation: Indications and Therapeutic Targets for Plasma Exchange
Mark E. Williams and Rasheed A. Balogun

191 Acetaminophen Toxicity and 5-Oxoproline (Pyroglutamic Acid): A Tale of Two Cycles, One an ATP-Depleting Futile Cycle and the Other a Useful Cycle
Michael Emmett

201 Cutaneous Manifestations of ESRD
Timur A. Galperin, Antonia J. Cronin, and Kieron S. Leslie

On the Cover
What’s the diagnosis? A 42-year-old male with a history of bilateral deep vein thrombosis due to antiphospholipid antibody syndrome (APLS) on warfarin presented to the hospital with a lower leg ulcer and cellulitis and was treated with antibiotics. He presented a few days later with right-sided flank pain and was found to have hematuria and nephrotic range proteinuria. The initial CT scan was positive for perirenal stranding on the right. While in the hospital, he developed severe abdominal pain, nausea and vomiting. Two days after admission he had a repeat CT scan, which demonstrated periaortic stranding consistent with aortitis. The cover image demonstrates this CT scan with contrast (coronal cut through the abdomen). The two midline structures depicted are the inferior vena cava and the aorta. Of note is the segmental attenuation and thickening of the infrarenal aortic wall (green arrows in image below) and periaortic fat infiltration. On kidney biopsy, he was found to have acute thrombotic angiopathy with active intravascular thrombosis, which confirmed the diagnosis of catastrophic antiphospholipid antibody syndrome. After 5 sessions of plasma exchange as well as high dose prednisone, the radiologic findings completely resolved. “Aortitis” is a pathologic term that refers to an abnormal inflammation of the aortic wall. Clinical features of aortitis are nonspecific and may include fever, abdominal or chest pain, and vascular insufficiency. A wide spectrum of infectious, inflammatory, and idiopathic conditions may result in the development of aortitis. Although Takayasu arteritis and giant cell arteritis are the most common rheumatologic causes of aortitis, other systemic diseases, such as rheumatoid arthritis, systemic lupus erythematosus, Behçet disease, and Cogan syndrome, may also be associated with aortitis. Aortitis has only rarely been described in association with APLS. (Image and text provided by Dr. Adina Voiculescu, Brigham and Women’s Hospital, Boston, MA)