Editorials

373 Adding to the Armamentarium: Antibiotic Dosing in Extended Dialysis
Bruce A. Mueller and Bridget A. Scoville
See related article on page 385.

376 Albuminuria and Cognitive Impairment
Linda Fried
See related article on page 437.

379 Adaptation in Gitelman Syndrome: “We Just Want to Pump You Up”
David H. Ellison
See related article on page 472.

383 Are Maintenance Corticosteroids No Longer Necessary after Kidney Transplantation?
Joshua J. Augustine and Donald E. Hricik
See related article on page 494.

Original Articles

Acute Kidney Injury /Acute Renal Failure

385 Pharmacokinetics of Ampicillin/Sulbactam in Critically Ill Patients with Acute Kidney Injury undergoing Extended Dialysis
Johan M. Lorenzen, Michael Broll, Volkhard Kaever, Heike Burhenne, Carsten Hafer, Christian Clajus, Wolfgang Knitsch, Olaf Burkhardt, and Jan T. Kielstein
See related editorial on page 373.

Chronic Kidney Disease

391 Efficacy and Safety of Paricalcitol Therapy for Chronic Kidney Disease: A Meta-Analysis
Jun Cheng, Wen Zhang, Xiaohui Zhang, Xiayu Li, and Jianghua Chen

401 Predictors of Estimated GFR Decline in Patients with Type 2 Diabetes and Preserved Kidney Function
Giacomo Zoppini, Giovanni Targher, Michel Chonchol, Vittorio Ortalda, Carlo Negri, Vincenzo Stoico, and Enzo Bonora

409 Risks of Subsequent Hospitalization and Death in Patients with Kidney Disease
Kenn B. Daratha, Robert A. Short, Cynthia F. Corbett, Michael E. Ring, Radica Alicic, Randall Choka, and Katherine R. Tuttle

Clinical Immunology and Pathology

417 Factor I Autoantibodies in Patients with Atypical Hemolytic Uremic Syndrome: Disease-Associated or an Epiphenomenon?
Clinical Nephrology

427 Clinical Features and Outcomes of IgA Nephropathy with Nephrotic Syndrome
Jwa-Kyung Kim, Jeong Ho Kim, Sang Choel Lee, Ea Wha Kang, Tae Ik Chang, Sung Jin Moon, Soo Young Yoon, Tae-Hyun Yoo, Shin-Wook Kang, Kyu Hun Choi, Dae Suk Han, Jeong Hae Kie, Beom Jin Lim, Hyeon Joo Jeong, and Seung Hyeok Han

437 Kidney Dysfunction and Cognitive Decline in Women
Imran Sajjad, Francine Grodstein, Jae H. Kang, Gary C. Curhan, and Julie Lin
See related editorial on page 376.

444 Clinical Course of 822 Children with Prenatally Detected Nephrouropathies
Isabel G. Quirino, Jose Silverio S. Diniz, Maria Candida F. Bouzada, Alamanda K. Pereira, Thais J. Lopes, Gabriela M. Paixão, Natalia N. Barros, Luisa C. Figueiredo, Antonio Carlos V. Cabral, Ana Cristina Simões e Silva, and Eduardo A. Oliveira

Critical Care Nephrology

452 Pharmacokinetics and Pharmacodynamics of Piperacillin-Tazobactam in 42 Patients Treated with Concomitant CRRT
Seth R. Bauer, Charbel Salem, Michael J. Connor Jr., Joseph Groszek, Maria E. Taylor, Peilin Wei, Ashita J. Tolwani, and William H. Fissell

Epidemiology and Outcomes

458 Characteristics and Outcomes of Children with Primary Oxalosis Requiring Renal Replacement Therapy
Jéréôme Harambat, Karlijn J. van Stralen, Laura Espinosa, Jaap W. Groothoff, Sally-Anne Hulton, Rimante Cerkauskiene, Franz Schaefer, Enrico Verrina, Kitty J. Jager, and Pierre Cochat, on behalf of the European Society for Pediatric Nephrology/European Renal Association-European Dialysis and Transplant Association (ESPN/ERA-EDTA) Registry

ESRD and Chronic Dialysis

466 Likelihood of Starting Dialysis after Incident Fistula Creation
Matthew J. Oliver, Robert R. Quinn, Amit X. Garg, S. Joseph Kim, Ron Wald, and J. Michael Paterson

Genetics

472 Localization of Tubular Adaptation to Renal Sodium Loss in Gitelman Syndrome
Guillaume Alexandre Favre, Valérie Nau, Isabelle Kolb, Rosa Vargas-Poussou, Thierry Hannedouche, and Bruno Moulin
See related editorial on page 379.

479 Kidney Volume and Functional Outcomes in Autosomal Dominant Polycystic Kidney Disease
Arlene B. Chapman, James E. Bost, Vicente E. Torres, Lisa Guay-Woodford, Kyongtae Ty Bae, Douglas Landsittel, Jie Li, Bernard F. King, Diego Martin, Louis H. Wetzel, Mark E. Lockhart, Peter C. Harris, Marva Moxey-Mims, Mike Flessner, William M. Bennett, and Jared J. Grantham

Mineral Metabolism/Bone Disease

487 Mortality in Kidney Disease Patients Treated with Phosphate Binders: A Randomized Study
Biagio Di Iorio, Antonio Bellasi, and Domenico Russo, on behalf of the INDEPENDENT Study Investigators

Renal Transplantation

494 Ten-Year Outcome after Rapid Discontinuation of Prednisone in Adult Primary Kidney Transplantation
See related editorial on page 383.

504 Long-Term Kidney Allograft Function and Survival in Prednisone-Free Regimens: Tacrolimus/Mycophenolate Mofetil versus Tacrolimus/Sirolimus
On the Cover

What’s the diagnosis? Conventional light microscopy of a urine sample from an untreated patient with adenine phosphoribosyltransferase (APRT) deficiency. The photomicrograph shows typical 2,8-dihydroxyadenine (DHA) crystal aggregates, which are round shaped and brown or yellow colored with a dark outline and central spicules. (Original magnification ×400). Small- and medium-sized crystal aggregates are positively birefringent and produce a central Maltese cross pattern when viewed with polarized light microscopy. APRT deficiency is a rare autosomal recessive disorder of purine metabolism that is estimated to affect 1:50,000–1:100,000 individuals. The absence of APRT enzyme activity prevents recycling of adenine, which is instead converted to DHA by xanthine dehydrogenase. DHA is excreted in the urine where it is poorly soluble, causing recurrent kidney stones and/or chronic kidney disease due to DHA crystalline nephropathy. A significant proportion of patients progress to kidney failure, even in the absence of a history of kidney stone disease. Lack of awareness of this disorder among clinicians and pathologists is a major concern because many patients experience symptomatic disease for years or decades before the correct diagnosis is made. A number of patients with recurrence of DHA crystalline nephropathy in kidney transplants have been reported, usually due to missed diagnosis and lack of proper treatment. Treatment with allopurinol, a xanthine dehydrogenase inhibitor, effectively prevents stone formation and kidney failure in patients with APRT deficiency. (Image and text provided by Vidar O. Edvardsson, MD, and Runolfur Palsson, MD, Landspitali–The National University Hospital of Iceland, Reykjavik)