Editorials

2023 Exercise to Improve Physical Function and Quality of Life in CKD
Manisha Jhamb and Daniel E. Weiner
See related article on page 2052.

2025 Misclassification of Obesity in CKD: Appearances Are Deceptive
Juan Jesús Carrero
See related article on page 2079.

2028 Urinary Creatinine and Survival in CKD
Caitlin E. Carter and Joachim H. Ix
See related article on page 2095.

2030 Acid-Base Balance and Physical Function
Matthew K. Abramowitz
See related article on page 2111.

2033 Fluid Management: The Challenge of Defining Standards of Care
Jennifer E. Flythe and M. Alan Brookhart
See related article on page 2124.

Original Articles

Acute Kidney Injury

2036 Recognition and Reporting of AKI in Very Low Birth Weight Infants
J. Bryan Carmody, Jonathan R. Swanson, Erika T. Rhone, and Jennifer R. Charlton

Chronic Kidney Disease

2044 Self-Rated Health and Adverse Events in CKD
Cassianne Robinson-Cohen, Yoshio N. Hall, Ronit Katz, Matthew B. Rivara, Ian H. de Boer, Bryan R. Kestenbaum, and Jonathan Himmelfarb

2052 Effects of a Renal Rehabilitation Exercise Program in Patients with CKD: A Randomized, Controlled Trial
Ana P. Rossi, Debra D. Burris, F. Leslie Lucas, Gail A. Crocker, and James C. Wasserman
See related editorial on page 2023.

Clinical Nephrology

2059 Effects of Intensive Low-Salt Diet Education on Albuminuria among Nondiabetic Patients with Hypertension Treated with Olmesartan: A Single-Blinded Randomized, Controlled Trial
Jin Ho Hwang, Ho Jun Chin, Sejoong Kim, Dong Ki Kim, Suhnggwon Kim, Jung Hwan Park, Sung Joon Shin, Sang Ho Lee, Bum Soon Choi, and Chun Soo Lim

2070 CKD and Hypertension during Long-Term Follow-Up in Children and Adolescents Previously Treated with Extracorporeal Membrane Oxygenation
Alexandra J.M. Zwiers, Hanneke IJsselstijn, Joost van Rosmalen, Saskia J. Gischler, Saskia N. de Wildt, Dick Tibboel, and Karlien Cransberg
Epidemiology and Outcomes

2079 Association of Sarcopenia with eGFR and Misclassification of Obesity in Adults with CKD in the United States
Deep Sharma, Meredith Hawkins, and Matthew K. Abramowitz
See related editorial on page 2025.

2089 Quality of Survey Reporting in Nephrology Journals: A Methodologic Review
Alvin Ho-Ting Li, Sonia M. Thomas, Alexandra Farag, Mark Duffett, Amit X. Garg, and Kyla L. Naylor

2095 Urinary Creatinine Excretion, Bioelectrical Impedance Analysis, and Clinical Outcomes in Patients with CKD: The CRIC Study
See related editorial on page 2028.

2104 Dietary Fiber, Kidney Function, Inflammation, and Mortality Risk
Hong Xu, Xiaoyan Huang, Ulf Risséus, Vidya M. Krishnamurthy, Tommy Cederholm, Johan Ärnlöv, Bengt Lindholm, Per Sjögren, and Juan Jesús Carrero

2111 Association of Serum Bicarbonate with Incident Functional Limitation in Older Adults
Robert Yenchek, Joachim H. Ix, Dena E. Rifkin, Michael G. Shlipak, Mark J. Samak, Melissa Garcia, Kushang V. Patel, Suzanne Satterfield, Tamara B. Harris, Anne B. Newman, and Linda F. Fried for the Health, Aging, and Body Composition Study
See related editorial on page 2030.

2117 Telomeric G-Tail Length and Hospitalization for Cardiovascular Events in Hemodialysis Patients
Shuma Hirashio, Ayumu Nakashima, Shigeihiro Doi, Kumiko Anno, Eriko Aoki, Akira Shimamoto, Noriaki Yorioka, Nobuoki Kohno, Takao Masaki, and Hidetoshi Tahara

ESRD and Chronic Dialysis

2124 Intradialytic Hypotension and Risk of Cardiovascular Disease
Bergur V. Stefánsson, Steven M. Brunelli, Claudia Cabrera, David Rosenbaum, Emmanuel Anum, Karthik Ramakrishnan, Donna E. Jensen, and Nils-Olov Stålhammar
See related editorial on page 2033.

Nephrolithiasis

2133 Risk of Fracture in Urolithiasis: A Population-Based Cohort Study Using the Health Improvement Network
Michelle R. Denburg, Mary B. Leonard, Kevin Haynes, Shamir Tuchman, Gregory Tasiian, Justine Shults, and Lawrence Copelovitch

2141 Stone Composition as a Function of Age and Sex
John C. Lieske, Andrew D. Rule, Amy E. Krambeck, James C. Williams, Eric J. Bergstrahl, Ramila A. Mehta, and Thomas P. Moyer

Renal Physiology

2147 Distal Convoluted Tubule
Arohan R. Subramanya and David H. Ellison

Attending Rounds

2164 A Young Patient with a Family History of Hypertension
Aldo J. Peixoto

In-Depth Review

2173 Regional Citrate Anticoagulation for RRTs in Critically Ill Patients with AKI
Santo Morabito, Valentina Pistolesi, Luigi Trifapepe, and Enrico Fiaccadori
On the Cover
What’s the diagnosis? A 24-year-old man with recently diagnosed advanced HIV infection (AIDS) characterized by CD4 7 cells/mm^3, viral load 11,324 copies/mL, presented with headache, nausea and vomiting, which progressively worsened over the past 30 days. In addition, the patient described diplopia and weight loss, but denied photophobia, neck stiffness, or flank pain. On exam, the patient was cachectic while oral candidiasis and anal condylomata infections were noted. Laboratory tests revealed pancytopenia. Cryptococcus sp. was found in the CSF by direct examination using India ink. The patient was initiated on intravenous amphotericin B for systemic cryptococcal infection. Urine sediment examination revealed 5 squamous epithelial cells/HPF, 30 white blood cells/HPF, 1 red blood cell/HPF and many encapsulated yeast forms free in the urine (left panel). In addition, several casts containing encapsulated yeast were identified (left panel), suggesting the presence of cryptococcal pyelonephritis. The yeast capsule was visualized on India ink stain of the urine (right panel). Over time, amphotericin B was subsequently switched to oral fluconazole. Combination antiretroviral therapy with abacavir, lamivudine, and efavirenz was also initiated for HIV infection. After 78 days of hospitalization, the patient was discharged to home in stable condition.

Cryptococcal infections are seen primarily in immunocompromised patients with defective cell-mediated immunity, such as those with AIDS, organ transplants, corticosteroid therapy, and reticuloendothelial malignancies. Disseminated infection most commonly involves the CNS and lungs, followed by the skin and bone marrow. Kidney infection, either as pyelonephritis or an abscess is uncommon, but has been described. In this case, the patient had AIDS, which predisposed him to disseminated cryptococcosis. While meningitis was clinically obvious, renal involvement as pyelonephritis was diagnosed based on a thorough examination of the spun urine sediment. The classic round-to-oval yeast with a polysaccharide capsule, which may have a single bud, is best seen with India ink stain (right panel). In this case, it was seen both in the CSF and urine. In patients with AIDS, treatment includes intravenous amphotericin B for 2 weeks followed by oral fluconazole for a minimum of 8-10 weeks. Combination antiretroviral therapy to achieve a CD4 count > 200 cells/mm^3 allows discontinuation of anti-fungal therapy. (Images and text provided by Jose Antonio Tesser Poloni and Anelise Kirsch, Irmandade da Santa Casa de Misericordia de Porto Alegre, Porto Alegre, Brazil, and Mark A. Perazella, MD, Yale University School of Medicine, New Haven, Connecticut)