Editorials

553 Can Renal Biopsy Be Used to Estimate Total Nephron Number?
Jennifer R. Charlton and Carolyn L. Abitbol
See related article on page 585.

556 Temporal Trends in the Epidemiology of Biopsy-Proven Glomerular Diseases: An Alarming Increase in Diabetic Glomerulosclerosis
Jean Hou and Mark Haas
See related article on page 614.

559 Managing Complexity in Older Patients with CKD
Jessica W. Weiss and Cynthia M. Boyd
See related article on page 635.

562 Noninvasive Imaging of Bone Microarchitecture in Patients Receiving Renal Transplant: Can it Replace Histology?
Maria Coco and James M. Pullman
See related article on page 644.

565 Donor Quality in the Eye of the Beholder: Interactions between Nonimmunologic Recipient and Donor Factors as Determinants of Graft Survival
Bethany J. Foster and Indra Rani Gupta
See related article on page 669.

Original Articles

Chronic Kidney Disease

568 Beliefs and Attitudes to Bowel Cancer Screening in Patients with CKD: A Semistructured Interview Study
Laura J. James, Germaine Wong, Jonathan C. Craig, Angela Ju, Narelle Williams, Wai H. Lim, Nicholas Cross, and Allison Tong

577 The 3-Year Incidence of Gout in Elderly Patients with CKD

Clinical Nephrology

585 Glomerular Density and Volume in Renal Biopsy Specimens of Children with Proteinuria Relative to Preterm Birth and Gestational Age
Kentaro Koike, Yohei Ikezumi, Nobuo Tsuboi, Go Kanzaki, Kotaro Haruhara, Yusuke Okabayashi, Takaya Sasaki, Makoto Ogura, Akihiko Saitho, and Takashi Yokoo
See related editorial on page 553.

Epidemiology and Outcomes

591 Association of Serum Triglyceride to HDL Cholesterol Ratio with All-Cause and Cardiovascular Mortality in Incident Hemodialysis Patients
Tae Ik Chang, Elani Streja, Melissa Soohoo, Tae Woo Kim, Connie M. Rhee, Csaba P. Kovesdy, Moti L. Kashyap, Nosratola D. Vaziri, Kamyar Kalantar-Zadeh, and Hamid Moradi

603 Association between Monocyte Count and Risk of Incident CKD and Progression to ESRD
Benjamin Bowe, Yan Xie, Hong Xian, Tingting Li, and Ziyad Al-Aly
Epidemiology and Outcomes (Continued)

614 Temporal and Demographic Trends in Glomerular Disease Epidemiology in the Southeastern United States, 1986–2015
See related editorial on page 556.

624 Association of TNF Receptor 2 and CRP with GFR Decline in the General Nondiabetic Population
Jørgen Schei, Vidar Tor Nyborg Stefansson, Bjørn Odvar Eriksen, Trond Geir Jenssen, Marit Dahl Solbu, Tom Wilsgaard, and Toralf Melsom

Geriatric Nephrology

635 Older Patients’ Perspectives on Managing Complexity in CKD Self-Management
See related editorial on page 559.

Mineral Metabolism/Bone Disease

644 Spine Trabecular Bone Score as an Indicator of Bone Microarchitecture at the Peripheral Skeleton in Kidney Transplant Recipients
Matthew Luckman, Didier Hans, Natalia Cortez, Kyle K. Nishiyama, Sanchita Agarawal, Chengchen Zhang, Lucas Nikkel, Sapna Iyer, Maria Fusaro, Edward X. Guo, Donald J. McMahon, Elizabeth Shane, and Thomas L. Nickolas
See related editorial on page 562.

Renal Transplantation

653 Association of Serum Phosphorus Concentration with Mortality and Graft Failure among Kidney Transplant Recipients
Hee Jung Jeon, Yong Chul Kim, Seokwoo Park, Clara Tammy Kim, Jongwon Ha, Duck Jong Han, Jieun Oh, Chun Soo Lim, In Mok Jung, Curie Ahn, Yon Su Kim, Jung Pyo Lee, and Young Hoon Kim

663 A Case-Based Analysis of Whether Living Related Donors Listed for Transplant Share ESRD Causes with Their Recipients
Arthur J. Matas, Rebecca E. Hays, and Hassan N. Ibrahim

669 Donor-Recipient Weight and Sex Mismatch and the Risk of Graft Loss in Renal Transplantation
Amanda J. Miller, Bryce A. Kiberald, Ian P. Alwayn, Ayo Odutayo, and Karthik K. Tennankore
See related editorial on page 565.

Glomerular Diseases: Update for the Clinician

677 IgA Nephropathy
Jennifer C. Rodrigues, Mark Haas, and Heather N. Reich

Evidence-Based Nephrology

687 Symptom Management of the Patient with CKD: The Role of Dialysis
Valerie Jorge Cabrera, Joni Hansson, Alan S. Kliger, and Fredric O. Finkelstein

Commentary

694 Commentary on Symptom Management of the Patient with CKD: The Role of Dialysis
Bryan Kestenbaum and Stephen L. Seliger

Kidney Case Conference: Nephrology Quiz and Questionnaire

696 Hypocalcemia in a Patient with Cancer
Mitchell H. Rosner
On the Cover

What is the diagnosis? A 77 year-old man status post renal transplant in 2014 presented with acute kidney injury (serum creatinine of 4.4 mg/dl, elevated from his baseline of 0.7 mg/dl). Prior to this presentation, the patient had a history of upper respiratory infection with bilateral pulmonary infiltrates, and was treated with antibiotics and steroids for one month without improvement of symptoms and with a progressive decline in renal function. A kidney biopsy was performed with clinical concern for rejection. By light microscopy, patchy necrotizing granulomatous inflammation was identified (left image). Special stains for fungal organisms and acid fast bacilli (AFB) were negative. Rare tubular epithelial cells demonstrated viral cytopathic effect with enlarged, smudgy-appearing nuclei (center, top). These same cells show strong nuclear immunoreactivity for adenovirus (center, bottom) and were negative for cytomegalovirus and polyoma virus. Subsequent testing by PCR revealed high titer adenovirus in the serum. Electron microscopy identified nuclei with viral inclusions composed of organized arrays of non-enveloped polyhedral viral particles characteristic of adenovirus (right image). These findings are consistent with Adenovirus nephropathy. Polyoma viruses (e.g., BK and JC virus) are the most common viral infections of the kidney allograft. Adenovirus, a non-encapsulated DNA virus can rarely cause renal dysfunction that can be serious in immunocompromised allograft recipients. Necrotizing granulomatous inflammation is often seen in adenoviral infections of the kidney allograft, and its presence should trigger appropriate workup to rule out other infectious etiologies that have similar histologic findings (e.g., infections caused by fungal organisms and acid fast bacilli). Since it is rare, treatment methods reported in the literature vary from supportive care to reduction of immunosuppression with addition of IVIG and/or anti-viral agents such as cidofovir or gancyclovir. (Images provided by Mirna Tokatly, Renal Pathology Fellow and Shreeram Akilesh, Assistant Professor, University of Washington, Seattle, Washington)