Editorials

341 Predicting Death without Dialysis in Elderly Patients with CKD
Ranveer Brar and Navdeep Tangri
See related article on page 363.

344 Advance Care Planning for Patients with Advanced CKD: A Need to Move Forward
Jean L. Holley and Sara N. Davison
See related article on page 390.

347 Overlooked Care Transitions: An Opportunity to Reduce Acute Care Use in ESRD
Kevin F. Erickson and Manjula Kurella Tamura
See related article on page 428.

350 Pain, Analgesics, and Safety in Patients with CKD
Sara N. Davison
See related article on page 435.

Original Articles

Acute Kidney Injury

353 Long-Term Risk of Upper Gastrointestinal Hemorrhage after Advanced AKI
Pei-Chen Wu, Chih-Jen Wu, Cheng-Jui Lin, and Vin-Cent Wu for the National Taiwan University Study Group on Acute Renal Failure Group

Chronic Kidney Disease

363 Development and Validation of a Model to Predict 5-Year Risk of Death without ESRD among Older Adults with CKD
Nisha Bansal, Ronit Katz, Ian H. De Boer, Carmen A. Peralta, Linda F. Fried, David S. Siscovick, Dena E. Ritzkin, Calvin Hirsch, Steven R. Cummings, Tamara B. Harris, Stephen B. Kritchevsky, Mark J. Sarnak, Michael G. Shlipak, and Joachim H. Ix
See related editorial on page 341.

Clinical Immunology and Pathology

372 Mapping Novel Immunogenic Epitopes in IgA Nephropathy

Clinical Nephrology

382 A Systematic Review of Glomerular Hyperfiltration Assessment and Definition in the Medical Literature
Francois Cachat, Christophe Combescure, Michel Cauderay, Eric Girardin, and Hassib Chehade

390 Advance Care Planning: A Qualitative Study of Dialysis Patients and Families
Sarah L. Gof, Nwamaka D. Eneanya, Rebecca Feinberg, Michael J. Germain, Lisa Marr, Joan Berzoff, Lewis M. Cohen, and Mark Unruh
See related editorial on page 344.

401 Estimation of GFR Using β-Trace Protein in Children
Samantha H. Witzel, Shih-Han S. Huang, Branko Braam, and Guido Filler
Clinical Pharmacology

410 **Number and Frequency of Albuminuria Measurements in Clinical Trials in Diabetic Nephropathy**
Tobias F. Kröpelin, Dick de Zeeuw, Dennis L. Andress, Maarten J. Bijlsma, Frederik Persson, Hans-Henrik Parving, and Hiddo J. Lambers Heerspink

ESRD and Chronic Dialysis

418 **Vascular Access Creation before Hemodialysis Initiation and Use: A Population-Based Cohort Study**
Ahmed A. Al-Jaishi, Charmaine E. Lok, Amit X. Garg, Joyce C. Zhang, and Louise M. Moist

Geriatric Nephrology

428 **Utilization of Acute Care among Patients with ESRD Discharged Home from Skilled Nursing Facilities**
Rasheeda K. Hall, Mark Toles, Mark Massing, Eric Jackson, Sharon Peacock-Hinton, Ann M. O’Hare, and Cathleen Colón-Emeric
See related editorial on page 347.

Health Services Research

435 **Chronic Pain and Analgesic Use in CKD: Implications for Patient Safety**
Juliana Wu, Jennifer S. Ginsberg, Min Zhan, Clarissa J. Diamantidis, Jingjing Chen, Corinne Woods, and Jeffrey C. Fink
See related editorial on page 350.

Hypertension

443 **Biomarkers of Kidney Injury and Klotho in Patients with Atherosclerotic Renovascular Disease**
Moo Yong Park, Sandra M. Herrmann, Ahmed Saad, Alfonso Eirin, Hui Tang, Amir Lerman, Stephen C. Textor, and Lilach O. Lerman

Mineral Metabolism/Bone Disease

452 **Association of Urinary Calcium Excretion with Serum Calcium and Vitamin D Levels**
Anita Rathod, Olivier Bonny, Idris Guessous, Paolo M. Suter, David Conen, Paul Erne, Isabelle Binet, Luca Gabutti, Augusto Gallino, Franco Muggli, Daniel Hayoz, Antoinette Péchére-Bertschi, Fred Paccaud, Michel Burnier, and Murielle Bochud

Renal Transplantation

463 **Accuracy of Different Equations in Estimating GFR in Pediatric Kidney Transplant Recipients**
Vandréa de Souza, Pierre Cochat, Muriel Rabilloud, Luciano Selistre, Mario Wagner, Aoumeur Hadj-Aissa, Olga Dolomanova, Bruno Ranchin, Jean Iwaz, and Laurence Dubourg

471 **A Longitudinal Study of Inflammation, CKD-Mineral Bone Disorder, and Carotid Atherosclerosis after Renal Transplantation**
Mahmut Ilker Yilmaz, Alper Sonmez, Mutlu Saglam, Tuncer Cayci, Selim Kilic, Hilmi Umut Unal, Murat Karaman, Hakki Cetinkaya, Tayfun Eyileten, Mahmut Gok, Yusuf Oguz, Abdulgaffar Vural, Francesca Mallamaci, and Carmine Zoccali

Renal Physiology

480 **Control of Urinary Drainage and Voiding**
Warren G. Hill

Role of the Medical Director

493 **The Medical Director and Quality Requirements in the Dialysis Facility**
Brigitte Schiller
In-Depth Review

500  AKI Associated with Cardiac Surgery
     Robert H. Thiele, James M. Isbell, and Mitchell H. Rosner

Mini-Review

515  Utility of Traditional Circulating and Imaging-Based Cardiac Biomarkers in Patients with Predialysis CKD
     Gates Colbert, Nishank Jain, James A. de Lemos, and S. Susan Hedayati

Special Feature

530  American Society of Nephrology Quiz and Questionnaire 2014: Acid-Base and Electrolyte Disorders
     Mitchell H. Rosner, Mark A. Perazella, and Michael J. Choi

On the Cover

What's the diagnosis? Maximum intensity projection (MIP) image of the abdominal aorta and bilateral renal arteries from a CT angiogram in a patient with Type IV Ehlers-Danlos syndrome demonstrate multifocal aneurysms involving both renal arteries. The differential diagnosis for patients with multiple renal artery aneurysms includes fibromuscular dysplasia, vasculitis such as Behcet’s disease, neurofibromatosis type 1, and collagen disorders such as Marfan’s syndrome and Ehlers-Danlos syndrome. Type IV is the vascular subtype of the Ehlers-Danlos syndrome. It is the most fatal form of the disorder due to the high incidence of spontaneous arterial rupture and/or dissection and the fragility of the arterial walls can make surgical repair difficult. Note that surgical ligation or endovascular repair are the preferred treatment strategies for aneurysms of Ehlers-Danlos syndrome. Conventional surgical repair or bypass grafting is often avoided due to the propensity for sutures to tear the fragile arterial wall leading to poor outcomes. (Images and text provided by Rahul A. Sheth, MD and Suvranu Ganguli, MD, Massachusetts General Hospital, Boston, Massachusetts)