

# CJASN

Clinical Journal of the American Society of Nephrology

March 2015 • Vol. 10 • No. 3

## 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. Rifkin, 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**

*Sang Hoon Woo, Tara K. Sigdel, Van T. Dinh, Minh-Thien Vu, Minnie M. Sarwal, and Richard A. Lafayette*

### 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. Goff, 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  $\beta$ -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 Péchère-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*

 eJournal club provides a timely and interactive electronic journal club experience by offering a forum in which CJASN readers have the opportunity to converse with the featured study authors. Visit [ejc.cjasn.org](http://ejc.cjasn.org) to learn more.

### 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 Suvaranu Ganguli, MD, Massachusetts General Hospital, Boston, Massachusetts*)