Patient Voice

1 Diet and Risk for Developing Kidney Disease
   Duane Sunwold
   See related editorial and article on pages 4 and 49, respectively.

3 Patient Priorities for Research Involving Peritoneal Dialysis
   Jonathan Haydak
   See related article on page 74.

Editorials

4 The Millennial Physician and the Obesity Epidemic: A Tale of Sugar-Sweetened Beverages
   Holly Kramer and David Shoham
   See related Patient Voice and article on pages 1 and 49, respectively.

7 Good Guys, Bad Guys, Guesses, and Near Misses in Nephrology
   Daniel Edmonston and Myles Wolf
   See related article on page 66.

10 Influence of Reimbursement Policies on Dialysis Modality Distribution around the World
   Edwina Anne Brown
   See related article on page 84.

13 Diuretic use in incident ESKD: Are we out of the loop?
   Ke Wang and Nisha Bansal
   See related article on page 95.

Original Articles

Acute Kidney Injury and ICU Nephrology

17 Population-Based Study of Risk of AKI with Levetiracetam
   Kevin Yau, Jorge G. Burneo, Racquel Jandoc, Eric McArthur, Flory Tsobo Muanda, Chirag R. Parikh, Ron Wald, Matthew A. Weir, and Amit X. Garg

Chronic Kidney Disease

28 Effects of Molidustat in the Treatment of Anemia in CKD
   Iain C. Macdougall, Tadao Akizawa, Jeffrey S. Berns, Thomas Bernhardt, and Thilo Krueger

40 Variability of Two Metabolomic Platforms in CKD
   Eugene P. Rhee, Sushrut S. Waikar, Casey M. Rebholz, Zihe Zheng, Regis Perichon, Clary B. Clish, Anne M. Evans, Julian Avila, Michelle R. Denburg, Amanda Hyre Anderson, Ramachandran S. Vasan, Harold I. Feldman, Paul L. Kimmel, and Josef Coresh, on behalf of the CKD Biomarkers Consortium

49 Patterns of Beverages Consumed and Risk of Incident Kidney Disease
   Casey M. Rebholz, Bessie A. Young, Ronit Katz, Katherine L. Tucker, Teresa C. Carithers, Arnita F. Norwood, and Adolfo Correa
   See related Patient Voice and editorial on pages 1 and 4, respectively.
Clinical Nephrology

57 Bleeding Complications after Pediatric Kidney Biopsy: A Systematic Review and Meta-Analysis
  Charles D. Varnell Jr., Hillarey K. Stone, and Jeffrey A. Welge

Diabetes and the Kidney

66 Effects of Dapagliflozin on Circulating Markers of Phosphate Homeostasis
  Maarten A. de Jong, Sergei I. Petrykiv, Gozewijn D. Laverman, Antonius E. van Herwaarden,
  Dick de Zeeuw, Stephan J.L. Bakker, Hiddo J.L. Heerspink, and Martin H. de Borst
  See related editorial on page 7.

Maintenance Dialysis

74 Patient and Caregiver Priorities for Outcomes in Peritoneal Dialysis: Multinational Nominal Group
  Technique Study
  Karine E. Manera, David W. Johnson, Jonathan C. Craig, Jenny I. Shen, Lorena Ruiz, Angela Yee-Moon Wang,
  Terence Yip, Samuel K.S. Fung, Matthew Tong, Achilles Lee, Yeoungjee Cho, Andrea K. Viecelli, Benedicte Sautenet,
  Armando Teixeira-Pinto, Edwina Anne Brown, Gillian Brunier, Jie Dong, Tony Dunning, Rajnish Mehrotra,
  Saraladevi Naicker, Roberto Pecoits-Filho, Jeffrey Perl, Martin Wilkie, and Allison Tong
  See related Patient Voice on page 3.

84 An International Analysis of Dialysis Services Reimbursement
  Arjan van der Tol, Norbert Lameire, Rachael L. Morton, Wim Van Biesen, and Raymond Vanholder
  See related editorial on page 10.

95 Association of Continuation of Loop Diuretics at Hemodialysis Initiation with Clinical Outcomes
  Scott Sibbel, Adam G. Walker, Carey Colson, Francesca Tentori, Steven M. Brunelli, and Jennifer Flythe
  See related editorial on page 13.

Mineral Metabolism

103 Effects of the Potassium-Binding Polymer Patiromer on Markers of Mineral Metabolism
  David A. Bushinsky, David M. Spiegel, Jinwei Yuan, Suzette Warren, Jeanene Fogli, and Pablo E. Pergola

Erratum

111 Correction

Kidney Case Conference: How I Treat

112 Screening Transplant Waitlist Candidates for Coronary Artery Disease
  John S. Gill

Nephropharmacology for the Clinician

115 Utility of Electronic Medical Record Alerts to Prevent Drug Nephrotoxicity
  Melissa Martin and F. Perry Wilson

Evidence-Based Nephrology

125 Demystifying the Benefits and Harms of Anticoagulation for Atrial Fibrillation in Chronic Kidney Disease
  Katherine G. Garlo, David J.R. Steele, Sagar U. Nigwekar, and Kevin E. Chan
  See related Commentary on page 137.

Commentary

137 Commentary on “Demystifying the Benefits and Harms of Anticoagulation for Atrial Fibrillation in CKD”
  Bryan R. Kestenbaum and Stephen L. Seliger
  See related Evidence-Based Nephrology on page 125.
Perspectives

139 Inclusion of Phosphorus in the Nutrition Facts Label
Lea Borgi

141 Plant-Based Diets in CKD
Deborah J. Clegg and Kathleen M. Hill Gallant

144 Kidneys on Chips: Emerging Technology for Preclinical Drug Development
Catherine K. Yeung and Jonathan Himmelfarb

147 Timing of Kidney Replacement Therapy in Acute Kidney Injury
Alexander Zarbock and Ravindra L. Mehta

Feature

150 Fostering Innovation in Symptom Management among Hemodialysis Patients: Paths Forward for Insomnia, Muscle Cramps, and Fatigue
Jennifer E. Flythe, Tandrea Hilliard, Elena Lumby, Graciela Castillo, Jazmine Orazi, Emaad M. Abdel-Rahman, Amy Barton Pai, Matthew Bertrand Rivara, Wendy L. St. Peter, Steven Darrow Weisbord, Caroline M. Wilkie, and Rajnish Mehrotra for the Kidney Health Initiative Prioritizing Symptoms of ESRD Patients for Developing Therapeutic Interventions Stakeholder Meeting Participants

Review

161 Blood Pressure Goals in Patients with CKD: A Review of Evidence and Guidelines
Alex R. Chang, Meghan Löser, Rakesh Malhotra, and Lawrence J. Appel

On the Cover

What’s the diagnosis?
Case description: The patient is a 64-year-old woman with a history of recent coronary artery bypass graft who presented with a one-week history of a purpuric rash on her ankles which spread to thighs, trunk, and arms. Creatinine increased from baseline of 0.9 to 3.1 mg/dL, and urine analysis revealed protein and blood. The clinical suspicion was for vasculitis; serologic studies including antineutrophil cytoplasmic antibody (ANCA) were negative, and complement levels were normal. A kidney biopsy was performed, and the rash responded well to prednisone.

Images:
- Left panel: Medullary angiitis, with prominent leukocytoclastic neutrophilic reaction in the medulla and medullary hemorrhage.
- Middle panel: Granular mesangial and peripheral capillary wall deposition of IgA by immunofluorescence microscopy.
- Right panel: Vascular necrosis in the medulla, with dissolution of the arterial media (arrows) and replacement by red blood cells and fibrin. Jones silver stain highlights the outline of residual vascular myocytes.

Teaching points: This is an unusual case of IgA nephropathy/Henoch-Schönlein purpura, with predominantly extraglomerular vasculitic-like lesions and associated medullary angiitis and hemorrhage. Glomerular changes were modest and limited to minimal mesangial expansion and focal endocapillary hypercellularity.

- Medullary angiitis is rare (0.19% of cases in the largest series from one institution, Hum Pathol. 2013 Apr;44(4):521-5).
- Most cases (63%) are associated with ANCA vasculitis.
- Approximately 20% of medullary angiitis may be attributed to IgA nephropathy, as in this case.

Rare cases of IgA nephropathy with features not well-represented in the Oxford classification validation may have different prognostic implications.

(Images and text were provided by Nicole K. Andeen, MD, Oregon Health & Science University, Portland, Oregon and Kumar Dinesh, Renal Care Consultants, Medford, Oregon)