

CJASN

Clinical Journal of the American Society of Nephrology

March 2016 • Vol. 11 • No. 3

Commentary

369 The American Society of Nephrology at 50: A Personal Perspective

William M. Bennett

Editorials

372 Rethinking First-Line Immunosuppression for Idiopathic FSGS

Jordana B. Cohen and Jonathan J. Hogan

See related article on page 386.

374 Finding a Signal in the Noise

Ciaran J. McMullan and John P. Forman

See related article on page 471.

377 Allocating Deceased Donor Kidneys to Sensitized Candidates

Richard N. Formica Jr.

See related article on page 505.

Original Articles

Chronic Kidney Disease

379 CKD of Uncertain Etiology: A Systematic Review

Joseph Lunyera, Dinushika Mohottige, Megan Von Isenburg, Marc Jeuland, Uptal D. Patel, and John W. Stanifer

Clinical Nephrology

386 Treatment with Glucocorticoids or Calcineurin Inhibitors in Primary FSGS

Louis-Philippe Laurin, Adil M. Gasim, Caroline J. Poulton, Susan L. Hogan, J. Charles Jennette, Ronald J. Falk, Bethany J. Foster, and Patrick H. Nachman

See related editorial on page 372.

Critical Care Nephrology

395 Serum Creatinine Back-Estimation in Cardiac Surgery Patients: Misclassification of AKI Using Existing Formulae and a Data-Driven Model

Martin Hermann Bernardi, Daniel Schmidlin, Robin Ristl, Clemens Heitzinger, Arno Schiferer, Thomas Neugebauer, Thomas Wrba, Michael Hiesmayr, Wilfred Druml, and Andrea Lassnigg

405 eGFR and Outcomes in Patients with Acute Decompensated Heart Failure with or without Elevated BUN

Katsuya Kajimoto, Naoki Sato, and Teruo Takano on behalf of the ATTEND investigators

Epidemiology and Outcomes

413 Soluble TWEAK and Major Adverse Cardiovascular Events in Patients with CKD

Valvanera Fernández-Laso, Cristina Sastre, Jose M. Valdivielso, Angels Betriu, Elvira Fernández, Jesús Egido, Jose L. Martín-Ventura, and Luis M. Blanco-Colio

423 Quality of Life and Physical Function in Older Patients on Dialysis: A Comparison of Assisted Peritoneal Dialysis with Hemodialysis

Osasuyi U. Iyasere, Edwina A. Brown, Lina Johansson, Les Huson, Joanna Smee, Alexander P. Maxwell, Ken Farrington, and Andrew Davenport

ESRD and Chronic Dialysis

- 431 Trends in Survival and Renal Recovery in Patients with Multiple Myeloma or Light-Chain Amyloidosis on Chronic Dialysis**

Alexandre Decourt, Bertrand Gondouin, Jean Christophe Delaroziere, Philippe Brunet, Marion Sallée, Stephane Burtey, Bertrand Dussol, Vadim Ivanov, Regis Costello, Cecile Couchoud, and Noemie Jourde-Chiche

- 442 Effect of Lowering the Dialysate Temperature in Chronic Hemodialysis: A Systematic Review and Meta-Analysis**

Reem A. Mustafa, Fadi Bdair, Elie A. Akl, Amit X. Garg, Heather Thiessen-Philbrook, Hassan Salameh, Sood Kisra, Gihad Nesrallah, Ahmad Al-Jaishi, Parth Patel, Payal Patel, Ahmad A. Mustafa, and Holger J. Schünemann

Hypertension

- 458 Differences in GFR and Tissue Oxygenation, and Interactions between Stenotic and Contralateral Kidneys in Unilateral Atherosclerotic Renovascular Disease**

Sandra M.S. Herrmann, Ahmed Saad, Alfonso Eirin, John Woollard, Hui Tang, Michael A. McKusick, Sanjay Misra, James F. Glockner, Lilach O. Lerman, and Stephen C. Textor

- 471 Visit-to-Visit Variability of BP and CKD Outcomes: Results from the ALLHAT**

Jeff Whittle, Amy I. Lynch, Rikki M. Tanner, Lara M. Simpson, Barry R. Davis, Mahboob Rahman, Paul K. Whelton, Suzanne Oparil, and Paul Muntner
See related editorial on page 374.

Mineral Metabolism/Bone Disease

- 481 Micro-CT in the Assessment of Pediatric Renal Osteodystrophy by Bone Histomorphometry**

Renata C. Pereira, David S. Bischoff, Dean Yamaguchi, Isidro B. Salusky, and Katherine Wesseling-Perry

Nephrolithiasis

- 488 Annual Incidence of Nephrolithiasis among Children and Adults in South Carolina from 1997 to 2012**

Gregory E. Tasian, Michelle E. Ross, Lihai Song, David J. Sas, Ron Keren, Michelle R. Denburg, David I. Chu, Lawrence Copelovitch, Christopher S. Saigal, and Susan L. Furth

Renal Transplantation

- 497 Association of Dialysis Duration with Outcomes after Transplantation in a Japanese Cohort**

Norihiko Goto, Manabu Okada, Takayuki Yamamoto, Makoto Tsujita, Takahisa Hiramitsu, Shunji Narumi, Akio Katayama, Takaaki Kobayashi, Kazuharu Uchida, and Yoshihiko Watarai

- 505 Allocating Deceased Donor Kidneys to Candidates with High Panel-Reactive Antibodies**

Howard M. Gebel, Bertram L. Kasiske, Sally K. Gustafson, Joshua Pyke, Eugene Shteyn, Ajay K. Israni, Robert A. Bray, Jon J. Snyder, John J. Friedewald, and Dorry L. Segev
See related editorial on page 377.

Commentary

- 512 Optimizing Enrollment of Patients into Nephrology Research Studies**

David T. Selewski, Emily G. Herreshoff, and Debbie S. Gipson

Education Series

- 518 Educational Tools: Thinking Outside the Box**

Majka Woods and Mark E. Rosenberg

Mini-Review

- 528 Is Bariatric Surgery an Effective Treatment for Type II Diabetic Kidney Disease?**

Allon N. Friedman and Bruce Wolfe

536 A Matter of Choice: Opportunities and Obstacles Facing People with ESRD

Judith Feder, Mark V. Nadel, and Mahesh Krishnan

Special Feature

539 Lessons Learned from EVOLVE for Planning of Future Randomized Trials in Patients on Dialysis

Patrick S. Parfrey, Geoffrey A. Block, Ricardo Correa-Rotter, Tilman B. Drüeke, Jürgen Floege, Charles A. Herzog, Gerard M. London, Kenneth W. Mahaffey, Sharon M. Moe, David C. Wheeler, and Glenn M. Chertow

On the Cover

What's the diagnosis? A 67-year-old woman with history of ESRD, hypertension, anemia, peripheral vascular disease, secondary hyperparathyroidism, and type 2 diabetes mellitus was admitted with an episode of blood oozing from her right upper arm loop arteriovenous graft (AVG). On examination, the AVG had a good bruit and thrill. There was a crusted lesion over the AVG, which had some dried blood and skin erosion (left panel). There was no associated erythema or purulent drainage. The patient denied fever, but the nursing staff documented a temperature of 100.3 °F. Laboratory data demonstrated a mild leukocytosis (WBC $10.4 \times 10^9/l$) and anemia (Hb 8.2 g/dl). Blood cultures were drawn. The nephrology team was concerned about infection and an associated defect in the graft (which lead to bleeding) that would require AVG removal. However, the vascular surgeons thought infection was unlikely and recommended covered stent placement at the site of the lesion. An indium 111-labeled white blood cell scan was ordered to evaluate for infection. The scan was positive with the AVG demonstrating uptake (right panel). Blood cultures returned positive for MRSA and the AVG was removed. Purulent material involving the AVG was noted during the operative procedure. Infection of an AVG is often obvious with swelling, erythema and purulent drainage in a patient with fever, leukocytosis and positive blood cultures. However, at times, an AVG may be infected with very few symptoms or signs present. Hyporesponsive anemia may be the only clue to an infected vascular access. This can provide a significant challenge to the healthcare providers trying to provide appropriate care. On the one hand, an infected AVG can lead to serious problems such as bacteremia with metastatic infections and graft rupture with serious hemorrhage, while excising an uninfected AVG eliminates an important vascular access site for hemodialysis in the patient. A test that is sometimes useful in elucidating infection within an AVG is the indium 111-labeled WBC scan. A relatively large study examining this modality showed that the test was most helpful in the management of suspected vascular access infections and osteomyelitis. Thus, in difficult cases, this test may provide useful diagnostic information. (*Images and text provided by Barry Gorlitsky, MD and Mark A. Perazella, MD, Yale University School of Medicine, New Haven, Connecticut*)