Patient Voice

1301 Developing Patient-Reported Outcome Measures that Can Improve Kidney Care
Lori Hartwell
See related article on page 1328.

Editorials

1303 Reappraisal of Hemodiafiltration for Managing Uremic Complications
Muriel Grooteman and Menso Nubé
See related article on page 1365.

1306 An Apple a Day Keeps Dialysis Away
Erin K. Stenson and Jessica Kendrick
See related article on page 1398.

1309 Are All SGLT2 Inhibitors Created Equal?
L. Parker Gregg and Sankar D. Navaneethan
See related article on page 1345.

1312 Evolving Demographics of Nephrology Research Workforce in the United States
Susan E. Quaggin and Benjamin D. Humphreys
See related article on page 1337.

1315 Gene Expression Profiling in Kidney Transplant Recipients on Immune Checkpoint Inhibitors:
More than Meets the Eye
Priyanka Jethwani and Anushree C. Shirali
See related article on page 1376.

Original Articles

Acute Kidney Injury and ICU Nephrology

1318 Acute Kidney Injury in the Modern Era of Allogeneic Hematopoietic Stem Cell Transplantation

Chronic Kidney Disease

1328 Evaluation of PROMIS Preference Scoring System (PROPr) in Patients Undergoing Hemodialysis or Kidney Transplant
Jing Zhang, Barry Dewitt, Evan Tang, Daniel Breitner, Mohammed Saqib, Dan Li, Rabail Siddiqui, Nathaniel Edwards, John Devin Peipert, Ron D. Hays, Janel Hamner, and Istvan Mucsi
See related Patient Voice on page 1301.

Clinical Nephrology

1337 Changing Demographics of NIDDK-Funded Physician-Scientists Doing Kidney Research
Delaney C. Abood, Spencer A. King, Douglas C. Eaton, and Susan M. Wall
See related editorial on page 1312.
Diabetes and the Kidney

1345 Ertugliflozin and Slope of Chronic eGFR: Prespecified Analyses from the Randomized VERTIS CV Trial
David Z.I. Cherney, Francesco Cosentino, Samuel Dagogo-Jack, Darren K. McGuire, Richard Pratley, Robert Frederich, Mario Maldonado, Chih-Chin Liu, Jie Liu, Annpey Pong, and Christopher P. Cannon, on behalf of the VERTIS CV Investigators
See related editorial on page 1309.

Glomerular and Tubulointerstitial Diseases

1355 Infection in Patients with Suspected Thrombotic Microangiopathy Based on Clinical Presentation
Benjamin Thoreau, Florent von Tokarski, Adeline Bauvois, Guillaume Bayer, Christelle Barbet, Sylvie Cloarec, Elodie Mérieux, Sébastien Lachot, Denis Garot, Louis Bernard, Emmanuel Cyn, Franck Perrotin, Claire Pouplard, François Maillot, Philippe Gatault, Bénédictie Sautenet, Emmanuel Rusch, Véronique Frêmeaux-Bacchi, Cécile Vigneau, Fadi Fakhouri, and Jean-Michel Halimi

Maintenance Dialysis

1365 Effect of Hemodiafiltration on the Progression of Neuropathy with Kidney Failure: A Randomized Controlled Trial
Amy Kang, Ria Arnold, Martin Gallagher, Paul Snelling, Johanne Green, Mangaloo Fernando, Matthew C. Kiernan, Samantha Hand, Kim Grmley, Jenny Burman, Anne Heath, Kris Rogers, Amritendu Bhattacharya, Brendan Smyth, Thomas Bradbury, Carmel Hawley, Vlado Perkovic, Arun V. Krishnan, and Meg J. Jardine, on behalf of the FINESSE Steering Committee
See related editorial on page 1303.

Transplantation

1376 Gene Expression Profiling in Kidney Transplants with Immune Checkpoint Inhibitor–Associated Adverse Events
Benjamin A. Adam, Naoka Murakami, Graeme Reid, Katie Du, Ruqaya Jasim, Christie L. Boils, Lihong Bu, Peter D. Hill, Allan G. Murray, Karine Renaudin, Candice Roufosse, Astrid Weins, Kevin Wen, Leonardo V. Riella, and Michael Mengel
See related editorial on page 1315.

1387 Belatacept for Simultaneous Calcineurin Inhibitor and Chronic Corticosteroid Immunosuppression Avoidance: Two-Year Results of a Prospective, Randomized Multicenter Trial
Dixon B. Kaufman, E. Steve Woodle, Adele Rike Shields, John Leone, Arthur Matas, Alexander Wiseman, Patricia West-Thielke, Ting Sa, Eileen C. King, and Rita R. Alloway, for the BEST Study Group

1398 Net Endogenous Acid Excretion and Kidney Allograft Outcomes
See related editorial on page 1306.

Research Letters

1407 Patiromer to Enable Spironolactone in Patients with Resistant Hypertension and CKD (AMBER): Results in the Prespecified Subgroup with Diabetes
Rajiv Agarwal, Patrick Rossignol, Martha R. Mayo, Ansgar Conrad, Susan Arthur, Bryan Williams, and William B. White

1410 COVID-19 among Adults Receiving Home versus In-Center Dialysis
Jeffrey Perl, Doneal Thomas, Yiwen Tang, Angye Yeung, Jane Ip, Matthew J. Oliver, and Peter G. Blake

Kidney Transplantation Long-Term Management Challenges

1413 Beyond the Biopsy: Monitoring Immune Status in Kidney Recipients
Roy D. Bloom and Joshua J. Augustine

Kidney Case Conference: Nephrology Quiz and Questionnaire

1423 Patient Management When Returning to Dialysis after a Failed Kidney Transplant
Louise M. Moist and John S. Gill
On the Cover

What is the Diagnosis?

A 67-year-old man presented after a seizure. He had stable chronic kidney disease (CKD) stage 5 with a serum creatinine in the range of 4 mg/dl until 2021, when it rose to 4.9 mg/dl in January 2021 and 7.5 mg/dl (with blood urea nitrogen [BUN] 200 mg/dl) in March 2021. He declined dialysis at that time.

His family reported that he became progressively more tremulous, less verbally responsive, and lost weight over the subsequent 2 months. He suffered a seizure and was brought to our institution with BUN 172 mg/dl and serum creatinine 7.8 mg/dl. Computed tomography scan demonstrated small kidneys with irregular cortex and no hydronephrosis (left image). He had asterixis, persistent hiccups, and disorientation. These symptoms were felt to be manifestations of the uremic syndrome. His skin had findings consistent with uremic frost (middle and right images).

Teaching Points:

Uremic frost is a cutaneous manifestation of advanced CKD that is rare in the modern era due to earlier initiation of dialysis. It is seen exclusively in patients with chronic, extreme elevation in BUN. Uremic frost forms due to high urea content of sweat in uremic patients, which leaves white, frost-like urea crystals on the skin upon evaporation (1). The patient was initiated on kidney replacement therapy. By day 8 of hospitalization, the uremic frost had resolved, and the patient was lucid with no tremors and good oral intake.

Reference


(Text and images provided by Raphael Rosen and Andrew Stephen Bomback, Columbia University Irving Medical Center, Department of Medicine, Division of Nephrology, New York, New York.)