Editorials

951 Hyponatremia and Mortality: How Innocent is the Bystander?
Ewout J. Hoorn and Robert Zietse
See related article on page 960.

954 Sleep Apnea in Individuals with Chronic Kidney Disease: A Wake-up Call
Sylvia E. Rosas
See related articles on pages 986 and 995.

957 Simultaneous Pancreas-Kidney Transplants Are Appropriate in Insulin-Treated Candidates with Uremia Regardless of Diabetes Type
Dixon B. Kaufman and David E.R. Sutherland
See related article on page 1198.

Original Articles

Acid Base and Electrolyte Disorders

960 Mortality and Serum Sodium: Do Patients Die from or with Hyponatremia?
Arun Chawla, Richard H. Sterns, Sagar U. Nigwekar, and Joseph D. Cappuccio
See related editorial on page 951.

Acute Renal Failure

966 Fluid Balance, Diuretic Use, and Mortality in Acute Kidney Injury
Morgan E. Grams, Michelle M. Estrella, Josef Coresh, Roy G. Brower, and Kathleen D. Liu for the National Heart, Lung, and Blood Institute Acute Respiratory Distress Syndrome Network

Chronic Kidney Disease

974 Serum Fetuin-A Levels Are Associated with Vascular Calcifications and Predict Cardiovascular Events in Renal Transplant Recipients
Céline Maréchal, Georg Schlieper, Pauline Nguyen, Thilo Krüger, Emmanuel Coche, Anne Robert, Jorgen Floege, Eric Goffin, Michael Jadoul, and Olivier Devuyst

986 Sleep-Disordered Breathing and Excessive Daytime Sleepiness in Chronic Kidney Disease and Hemodialysis
Maria-Eleni Roumelioti, Daniel J. Buysse, Mark H. Sanders, Patrick Strollo, Anne B. Newman, and Mark L. Unruh
See related editorial on page 954.

995 High Prevalence of Obstructive Sleep Apnea and Its Association with Renal Function among Nondialysis Chronic Kidney Disease Patients in Japan: A Cross-Sectional Study
Yusuke Sakaguchi, Tatsuya Shoji, Hiroaki Kawabata, Kakuya Niihata, Akira Suzuki, Tetsuya Kaneko, Noriyuki Okada, Yoshitaka Isaka, Hiromi Rakugi, and Yoshiharu Tsubakihara
See related editorial on page 954.

1001 Circulating Follistatin in Patients with Chronic Kidney Disease: Implications for Muscle Strength, Bone Mineral Density, Inflammation, and Survival
Tetsu Miyamoto, Juan Jesús Carrero, Abdul Rashid Qureshi, Björn Anderstam, Olof Heimbürger, Peter Bárány, Bengt Lindholm, and Peter Stenvinkel
Clinical Immunology and Pathology

1009 Proliferative Glomerulonephritis Secondary to Dysfunction of the Alternative Pathway of Complement

Clinical Nephrology

1018 Low-Intensity Adjusted-Dose Warfarin for the Prevention of Hemodialysis Catheter Failure: A Randomized, Controlled Trial
Trevor J. Wilkieson, Alistair J. Ingram, Mark A. Crowther, Steven D. Soroka, Ryuta Nagai, Kailash K. Jindal, and Catherine M. Clase

Diabetes and the Kidney

1025 Aliskiren in Combination with Losartan Reduces Albuminuria Independent of Baseline Blood Pressure in Patients with Type 2 Diabetes and Nephropathy
Frederik Persson, Julia B. Lewis, Edmund J. Lewis, Peter Rossing, Norman K. Hollenberg, and Hans-Henrik Parving

1032 Renal Function in Type 2 Diabetes with Rosiglitazone, Metformin, and Glyburide Monotherapy
John M. Lachin, Giancarlo Viberti, Bernard Zinman, Steven M. Haffner, R. Paul Aftring, Gitanjali Paul, Barbara G. Kravitz, William H. Herman, Rury R. Holman, Steven E. Kahn, and the ADOPT Study Group

Dialysis

1041 Glycemic Control and Survival in Peritoneal Dialysis Patients with Diabetes Mellitus
Uyen Duong, Rajnish Mehrotra, Miklos Z. Molnar, Nazanin Noori, Csaba P. Kovacs, Allen R. Nissenson, and Kamyar Kalantar-Zadeh

1049 Impact of Short Daily Hemodialysis on Restless Legs Symptoms and Sleep Disturbances
Bertrand L. Jaber, Brigitte Schiller, John M. Burkart, Rachid Daoui, Michael A. Kraus, Yoojin Lee, Brent W. Miller, Isaac Teitelbaum, Amy W. Williams, and Fredric O. Finkelstein on behalf of the FREEDOM Study Group

1057 Transient Elastography to Assess Hepatic Fibrosis in Hemodialysis Chronic Hepatitis C Patients
Chen-Hua Liu, Cheng-Chao Liang, Kai-Wen Huang, Chun-Jen Lin, Shih-I Chen, Jou-Wei Lin, Peir-Haur Hung, Hung-Bin Tsai, Ming-Yang Lai, Pei-Jer Chen, Jun-Heng Chen, Ding-Shinn Chen, and Jia-Horng Kao

1066 Inferior Vena Cava Diameter and Left Atrial Diameter Measure Volume but Not Dry Weight
Rajiv Agarwal, J. Michael Bouldin, Robert P. Light, and Ashok Garg

1073 Bedside Screening for Fistula Stenosis Should Be Tailored to the Site of the Arteriovenous Anastomosis
Nicola Tessitore, Valeria Bedogna, Giovanni Lipari, Edoardo Melilli, William Mantovani, Elda Baggio, Antonio Lupo, Giancarlo Mansueto, and Albino Poli

1081 Pharmacokinetics and Pharmacodynamics of Intravenous Daptomycin during Continuous Ambulatory Peritoneal Dialysis
Katie E. Cardone, Thomas P. Lodise, Nimish Patel, Christopher D. Hoy, Shari Meola, Harold J. Manley, George L. Drusano, and Darren W. Grabe

1089 Thrombolysis for Acute Stroke in Hemodialysis: International Survey of Expert Opinion
Santiago Palacio, Nicole R. Gonzales, Navdeep S. Sangha, Lee A. Birnbaum, and Robert G. Hart

Epidemiology Outcomes

1094 Survival in Pediatric Dialysis and Transplant Patients
Susan M. Samuel, Marcello A. Tonelli, Bethany J. Foster, R. Todd Alexander, Alberto Nettet-Aguirre, Andrea Soo, Brenda R. Hemmelgarn, and the Pediatric Renal Outcomes Canada Group
1100 Quality-of-Life and Mortality in Hemodialysis Patients: Roles of Race and Nutritional Status

1112 Elevated Non-high-density Lipoprotein Cholesterol (Non-HDL-C) Predicts Atherosclerotic Cardiovascular Events in Hemodialysis Patients
Tetsuo Shoji, Ikuto Masakane, Yuzo Watanabe, Kunitoshi Iseki, and Yoshiharu Tsubaki for the Committee of Renal Data Registry, Japanese Society for Dialysis Therapy

1121 Cancer-Specific Mortality in Chronic Kidney Disease: Longitudinal Follow-Up of a Large Cohort
Pei-Hsuan Weng, Kuan-Yu Hung, Hsien-Liang Huang, Jen-Hau Chen, Pei-Kun Sung, and Kuo-Chin Huang

ESRD & Chronic Dialysis
1129 Modeled Urea Distribution Volume and Mortality in the HEMO Study
John T. Daugirdas, Tom Greene, Thomas A. Depner, Nathan W. Levin, and Glenn M. Chertow

Hereditary Disease
1139 Clinical Utility of Genetic Testing in Children and Adults with Steroid-Resistant Nephrotic Syndrome
Sheila Santín, Gemma Bullich, Bárbara Tazón-Vega, Rafael García-Maset, Isabel Giménez, Irene Silva, Patricia Ruíz, José Ballarín, Roser Torra, and Elisabet Ars

Mineral Metabolism/Bone Disease
1149 Determinants of Osteopenia in Male Renal-Stone–Disease Patients with Idiopathic Hypercalciuria
Emmanuel Letavernier, Olivier Traxer, Michel Daudon, Mohammed Tligui, Jérôme Hubert-Briere, Dominique Guerrot, Aline Sebag, Laurent Baud, and Jean-Philippe Haymann

1155 Simulation-Based Sodium Thiosulfate Dosing Strategies for the Treatment of Calciphylaxis
Rajendra Pratap Singh, Hartmut Derendorf, and Edward A. Ross

Renal Transplantation
1160 Implications of Donor Disseminated Intravascular Coagulation on Kidney Allograft Recipients
Connie J. Wang, Shahzad Shafique, Johanna McCullagh, Dennis A. Diederich, Franz T. Winklhofer, and James B. Wetmore

1168 Induction Immunosuppressive Therapy in the Elderly Kidney Transplant Recipient in the United States
Jagbir Gill, Marcelo Sampaio, John S. Gill, James Dong, Hung-Tien Kuo, Gabriel M. Danovitch, and Suphamai Bunnapradist

1179 Donor Phosphorus Levels and Recipient Outcomes in Living-Donor Kidney Transplantation
Peter C. Chang, Shameela Saha, Amanda M. Gomes, Aparna Padiyar, Kenneth A. Bodziak, Emilio D. Poggio, Donald E. Hricik, and Joshua J. Augustine

1185 A Call to Action: Variability in Guidelines for Cardiac Evaluation before Renal Transplantation
Scott E. Friedman, Robert T. Palac, David M. Zlotnick, Michael C. Chobanian, and Salvatore P. Costa

1192 Outcomes Associated with Influenza Vaccination in the First Year after Kidney Transplantation
Frank P. Hurst, Jessica J. Lee, Rahul M. Jindal, Lawrence Y. Agodoa, and Kevin C. Abbott

1198 Outcomes of Simultaneous Pancreas-Kidney Transplantation in Type 2 Diabetic Recipients
Marcelo Santos Sampaio, Hung-Tien Kuo, and Suphamai Bunnapradist
See related editorial on page 957.
Original Articles (Continued)

1207 C4d Staining In Renal Allograft Biopsies with Early Acute Rejection and Subsequent Clinical Outcome

In-Depth Review

1214 Recurrence of Secondary Glomerular Disease after Renal Transplantation
Claudio Ponticelli, Gabriella Moroni, and Richard J. Glassock

Special Feature

1222 Early Start of Dialysis: A Critical Review
Steven Rosansky, Richard J. Glassock, and William F. Clark

On the Cover
What’s the diagnosis? This hemodialysis patient presented with swelling of the left neck veins (top images), which resolved after angioplasty (bottom images). A left upper arm brachial-axillary prosthetic access had been placed in 2003. In 2008, he presented with enlarged left neck veins and total occlusion of the left brachiocephalic vein which did not resolve with angioplasty alone. A 12×40 mm nitinol stent was placed (visible on angiographic images), and over the following 26 months he underwent 6 angioplasties with intervals shortening to less than 4 weeks. A 11×50 mm stent graft was inserted without recurrence of the stenosis thus far for 8 months. Both devices were used off-label. Preceding the left upper arm access a left internal jugular vein tunneled catheter was used for over one year. Central vein stenoses are often associated with previously present tunneled hemodialysis catheters on the side of a dialysis access. Central vein stenoses chronically recur and require repeated angioplasties. Uncovered stents can reduce the frequency of angioplasties. Large diameter stent grafts for use in central veins have only recently become available, thus no long-term outcomes data is available on their use. (Image and text provided by Dr. Dirk Hentschel, Brigham and Women’s Hospital)