Editorials

463 Fistulas First—But Can They Last?
Laura M. Dember
See related article on page 575.

465 Dialysis Survival after Graft Loss: Are We Finally Comparing “Apples to Apples”?
Louise Moist
See related article on page 582.

Original Articles

Acute Renal Failure

467 Effluent Volume in Continuous Renal Replacement Therapy Overestimates the Delivered Dose of Dialysis
Rolando Claure-Del Granado, Etienne Macedo, Glenn M. Chertow, Sharon Soroko, Jonathan Himmelfarb, T. Alp Ikizler, Emil P. Paganini, and Ravindra L. Mehta

Chronic Kidney Disease

476 Neutrophil Gelatinase-Associated Lipocalin in the Diagnosis of Type 1 Cardio-Renal Syndrome in the General Ward
Margarida Alvelos, Rodrigo Pimentel, Elika Pinho, André Gomes, Patricia Lourenço, Maria José Teles, Pedro Almeida, João Tiago Guimarães, and Paulo Bettencourt

482 Folic Acid Therapy and Cardiovascular Disease in ESRD or Advanced Chronic Kidney Disease: A Meta-Analysis
Xianhui Qin, Yong Huo, Craig B. Langman, Fanfan Hou, Yunfeng Chen, Debora Matossian, Xiping Xu, and Xiaobin Wang

489 Factors Affecting Employment at Initiation of Dialysis
Rebecca J. Muehrer, Dori Schatell, Beth Witten, Ronald Gangnon, Bryan N. Becker, and R. Michael Hofmann

497 Implications of the CKD-EPI GFR Estimation Equation in Clinical Practice

505 Monocyte Angiotensin Converting Enzyme Expression May Be Associated with Atherosclerosis Rather than Arteriosclerosis in Hemodialysis Patients
Christof Ulrich, Eric Seibert, Gunnar H. Heine, Danilo Fliser, and Matthias Girndt

512 Cardiorespiratory Fitness Is Independently Associated with 25-Hydroxyvitamin D in Chronic Kidney Disease
William G. Petchey, Erin J. Howden, David W. Johnson, Carmel M. Hawley, Thomas Marwick, and Nicole M. Isbel

Clinical Nephrology

519 Microvolt T-Wave Alternans in End-Stage Renal Disease Patients—Associations with Uremic Cardiomyopathy
Rajan K. Patel, Patrick B. Mark, Crawford Halliday, Tracey Steedman, Henry J. Dargie, Stuart M. Cobbe, and Alan G. Jardine

528 Determinants and Prognostic Significance of Electrocardiographic Left Ventricular Hypertrophy Criteria in Chronic Kidney Disease
Rajiv Agarwal and Robert P. Light
Decline in Residual Renal Function in Automated Compared with Continuous Ambulatory Peritoneal Dialysis
Wieneke Marleen Michels, Marion Verdijin, Diana C. Grootendorst, Saskia le Cessie, Elisabeth Wilhelmina Boeschoten, Friedo Wilhelm Dekker, and Raymond Theodorus Krediet, for the NECOSAD Study Group

Blood Pressure Control and Left Ventricular Mass in Children with Chronic Kidney Disease
Manish D. Sinha, Shane M. Tibby, Pernille Rasmussen, Debbie Rawlins, Charles Turner, R. Neil Dalton, Christopher J.D. Reid, Susan P.A. Rigden, Caroline J. Booth, and John M. Simpson

Which Creatinine and Cystatin C Equations Can Be Reliably Used in Children?
Justine Bacchetta, Pierre Cochat, Nicolas Rognant, Bruno Ranchin, Aoumeur Hadj-Aissa, and Laurence Dubourg

Peritoneal Albumin and Protein Losses Do Not Predict Outcome in Peritoneal Dialysis Patients
Olga Balafa, Nynke Halbesma, Dirk G. Struijk, Friedo W. Dekker, and Raymond T. Krediet

Serum Bilirubin Links UGT1A1*28 Polymorphism and Predicts Long-Term Cardiovascular Events and Mortality in Chronic Hemodialysis Patients
Ying-Hwa Chen, Szu-Chun Hung, and Der-Chergrg Targn

Decreased Cumulative Access Survival in Arteriovenous Fistulas Requiring Interventions to Promote Maturation
Timmy Lee, Ahsan Ullah, Michael Allon, Paul Succop, Mahmoud El-Khatib, Rino Munda, and Prabir Roy-Chaudhury
See related editorial on page 463.

Impact of Dialysis Modality on Survival after Kidney Transplant Failure
Jeffrey Perl, Omar Hasan, Joanne M. Bargman, Depeng Jiang, Yingbo Na, John S. Gill, and S. Vanita Jassal
See related editorial on page 465.

Peritoneal Membrane Phosphate Transport Status: A Cornerstone in Phosphate Handling in Peritoneal Dialysis
Ana Paula Bernardo, Sebastián Azorin Contesse, Maria Auxiliadora Bajo, Anabela Rodrigues, Gloria Del Peso, Marta Ossorio, António Cabrita, and Rafael Selgas

Assessing Creatinine Clearance from Modification of Diet in Renal Disease Study Equations in the ADEMEX Cohort: Limitations and Potential Applications
James A. Sloand, John K. Leypoldt, Bruce F. Culleton, Mary E. Gellens, Ramon Paniagua, Dante Amato, and Edward F. Vonesh

Satisfaction with Renal Replacement Therapy and Education: The American Association of Kidney Patients Survey

End-Stage Renal Disease Status and Critical Illness in the Elderly
Manish M. Sood, Dan Roberts, Paul Komenda, Joe Bueti, Martina Reslerova, Julie Mojica, and Claudio Rigatto

Prescribed Dietary Phosphate Restriction and Survival among Hemodialysis Patients
Katherine E. Lynch, Rebecca Lynch, Gary C. Curhan, and Steven M. Brunelli

Epidemiology and Outcomes

Potentially Modifiable Factors Affecting the Progression of Autosomal Dominant Polycystic Kidney Disease
Vicente E. Torres, Jared J. Grantham, Arlene B. Chapman, Michal Mrug, Kyongtae T. Bae, Bernard F. King Jr., Louis H. Wetzel, Diego Martin, Mark E. Lockhart, William M. Bennett, Marva Moxey-Mims, Kaleab Z. Abebe, Yan Lin, and James E. Bost, for the Consortium for Radiologic Imaging Studies of Polycystic Kidney Disease (CRISP)
Hypertension

**648 Association between Hemoglobin Level and Endothelial Function in Uncomplicated, Untreated Hypertensive Patients**
Raffaele Maio, Angela Sciacqua, Rosamaria Bruni, Alessandra Pascale, Giuseppe Carullo, Paola E. Scarpino, Desirée Addesi, Ines Spinelli, Giulia Galiano Leone, and Francesco Perticone

Renal Transplantation

**656 Nonlinear Relationship between Mycophenolate Mofetil Dose and Mycophenolic Acid Exposure: Implications for Therapeutic Drug Monitoring**
Brenda C.M. de Winter, Ron A.A. Mathot, Ferdi Sombogaard, Arnold G. Vulto, and Teun van Gelder

In-Depth Reviews

**664 The Efficacy and Safety of the 3-Hydroxy-3-methylglutaryl-CoA Reductase Inhibitors in Chronic Kidney Disease, Dialysis, and Transplant Patients**
Ali Olyaei, Erin Greer, Rowena Delos Santos, and Jose Rueda

**679 Henoch-Schönlein Purpura Nephritis: Pathophysiology, Treatment, and Future Strategy**
Jean-Claude Davin

Special Feature

**690 Tacrolimus-Induced Neutropenia in Renal Transplant Recipients**
Anja De Rycke, Daan Dierickx, and Dirk R. Kuypers

---

**On the Cover**

This periodic acid-Schiff stained section shows an arteriole with “onion skin” lesion, characterized by extensive remodeling and concentric thickening of the vessel wall, with duplication of the cells and matrix layers of the media, intimal thickening, occlusion and complete obliteration of the vessel lumen. These severe vascular changes result from repetitive injury and repair of the vessel walls and have been classically described in malignant hypertension; however, the changes can be observed in a number of other conditions associated with a primary form of vascular injury, including scleroderma, undifferentiated connective tissue disease, antiphospholipid antibody syndrome, healed hemolytic uremic syndrome, and the use of drugs with vascular toxicity (such as cocaine, amphetamines, VEGF inhibitors). (Image and text provided by Dr. Vanesa Bijol, Brigham and Women’s Hospital)