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Editorials

1911 Continued Search for Therapies to Favorably Modify Phosphate and FGF23 Levels in CKD

Rupal Mehta and Tamara Isakova
See related article on page 1930.

1914 A Perspective on Inherited Kidney Disease: Lessons for Practicing Nephrologists

Mathieu Lemaire and Rulan S. Parekh
See related articles on pages 1962 and 1974.

1917 Burden of Proof—When Is Kidney Disease Attributable to Diabetes?

Pierre-Jean Saulnier and Robert G. Nelson
See related article on page 1984.

1919 Effective Treatment of PD Peritonitis

Beth Piraino
See related article on page 2016.

Original Articles

Chronic Kidney Disease

1922 Urinary Fibrinogen as a Predictor of Progression of CKD

Hongtian Wang, Chunxia Zheng, Yinghui Lu, Qi Jiang, Ru Yin, Ping Zhu, Minlin Zhou, and Zhihong Liu

1930 Randomized Clinical Trial of Sevelamer Carbonate on Serum Klotho and Fibroblast Growth Factor 23 in CKD

Sophie Liabeuf, Jean-Philippe Ryckelynck, Najeh El Esper, Pablo Ureña, Christian Combe, Bertrand Dussol, Denis Fouque, Philippe Vanhille, Luc Frimat, Eric Thervet, Romuald Mentaverri, Dominique Prié, and Gabriel Choukroun, for the FRENCH Study collaborators
See related editorial on page 1911.

1941 Changes in Albuminuria and Subsequent Risk of Incident Kidney Disease

Keiichi Sumida, Miklos Z. Molnar, Praveen K. Potukuchi, Koshy George, Fridtjof Thomas, Jun Ling Lu, Kunihiro Yamagata, Kamyar Kalantar-Zadeh, and Csaba P. Kovesdy

Clinical Nephrology

1951 Sociodemographic, Psychologic Health, and Lifestyle Outcomes in Young Adults on Renal Replacement Therapy

Alexander J. Hamilton, Rhian L. Clissold, Carol D. Inward, Fergus J. Caskey, and Yoav Ben-Shlomo

Cystic Kidney Disease

1962 Prospective Evaluation of Kidney Disease in Joubert Syndrome

Leah R. Fleming, Daniel A. Doherty, Melissa A. Parisi, Ian A. Glass, Joy Bryant, Roxanne Fischer, Baris Turkbey, Peter Choyke, Kailash Daryanani, Meghana Vemulapalli, James C. Mullikin, May Christine Malicdan, Thierry Vilboux, John A. Sayer, William A. Gahl, and Meral Gunay-Aygun
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Cystic Kidney Disease (Continued)

1974 Phenotypic Spectrum of Children with Nephronophthisis and Related Ciliopathies

Jens König, Birgitta Kranz, Sabine König, Karl Peter Schlingmann, Andrea Titieni, Burkhard Tönshoff, Sandra Habbig, Lars Pape, Karsten Häffner, Matthias Hansen, Anja Büscher, Martin Bald, Heiko Billing, Raphael Schild, Ulrike Walden, Tobias Hampel, Hagen Staude, Magdalena Riedl, Norbert Gretz, Martin Lablans, Carsten Bergmann, Friedhelm Hildebrandt, Heymut Omran, and Martin Konrad, for the Gesellschaft für Pädiatrische Nephrologie (GPN)
See related editorial on page 1914.

Diabetes and the Kidney

1984 Diabetes and CKD in the United States Population, 2009–2014

Leila R. Zelnick, Noel S. Weiss, Bryan R. Kestenbaum, Cassianne Robinson-Cohen, Patrick J. Heagerty, Katherine Tuttle, Yoshio N. Hall, Irl B. Hirsch, and Ian H. de Boer
See related editorial on page 1917.

Maintenance Dialysis

1991 Multi-Disciplinary Vascular Access Care and Access Outcomes in People Starting Hemodialysis Therapy

Simardeep Gill, Robert Quinn, Matthew Oliver, Fareed Kamar, Rameez Kabani, Daniel Devoe, Priyanka Mysore, Neesh Pannu, Jennifer MacRae, Braden Manns, Brenda Hemmelgarn, Matthew James, Marcello Tonelli, Adriane Lewin, Ping Liu, and Pietro Ravani

2000 International Comparisons of Prevalence, Awareness, and Treatment of Pruritus in People on Hemodialysis

Hugh C. Rayner, Maria Larkina, Mia Wang, Matthew Graham-Brown, Sabine N. van der Veer, Tefvik Ecder, Takeshi Hasegawa, Werner Kleophas, Brian A. Bieber, Francesca Tentori, Bruce M. Robinson, and Ronald L. Pisoni

2008 Brief Mindfulness Meditation for Depression and Anxiety Symptoms in Patients Undergoing Hemodialysis: A Pilot Feasibility Study

Zoë Thomas, Marta Novak, Susanna Gabriela Torres Platas, Maryse Gautier, Angela Potes Holgin, Rebecca Fox, Marilyn Segal, Karl J. Loooper, Mark Lipman, Steven Selchen, Istvan Mucsi, Nathan Herrmann, and Soham Rej

2016 Residual Kidney Function and Peritoneal Dialysis–Associated Peritonitis Treatment Outcomes

Rachel Whitty, Joanne M. Bargman, Alex Kiss, Linda Dresser, and Philip Lui
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Transplantation

2024 Association of Kidney Transplantation with Survival in Patients with Long Dialysis Exposure

Caren Rose, Jagbir Gill, and John S. Gill

Glomerular Diseases: Update for the Clinician

2032 Diabetic Kidney Disease: Challenges, Progress, and Possibilities

Radica Z. Alicic, Michele T. Rooney, and Katherine R. Tuttle

Kidney Case Conference: How I Treat

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Dennis G. Moledina and Mark A. Perazella

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2050 The Journey to Full Health Care Responsibility for One ESCO Provider

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Karl A. Nath and Michael Allon

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John J. Friedewald and Nicole Turgeon

2063 Early Experience with the New Kidney Allocation System: A Perspective from UNOS

Darren E. Stewart and David K. Klassen

Feature

2066 Statistical Methods for Recurrent Event Analysis in Cohort Studies of CKD

Wei Yang, Christopher Jepson, Dawei Xie, Jason A. Roy, Haochang Shou, Jesse Yenchih Hsu, Amanda Hyre Anderson, J. Richard Landis, Jiang He, Harold I. Feldman, and on behalf of the Chronic Renal Insufficiency Cohort (CRIC) Study Investigators

On the Cover

What's the diagnosis?

A 72 year-old woman with a history of end-stage kidney disease secondary to hypertensive nephrosclerosis status post living donor kidney transplant six months prior presented for evaluation of skin lesions. She reported the appearance of tender, erythematous skin lesions on her bilateral upper and lower extremities and face one week prior to presentation, with new lesions appearing daily. She denied other symptoms. She underwent a skin biopsy which demonstrated lobular panniculitis with mixed inflammatory infiltrate; stains for fungi and mycobacteria were negative. Fungal culture of the biopsied tissue grew mold, identified by DNA sequencing as *Blastomyces dermatitidis*.

She was admitted for evaluation and treatment. A magnetic resonance image (MRI) of the brain revealed multiple new intraparenchymal, leptomeningeal, and facial subcutaneous enhancing foci suspicious for blastomycosis. A computer tomography image of the chest showed a centrally necrotic hilar lymph node and a few scattered pulmonary nodules. She was initiated on treatment with intravenous liposomal amphotericin and had improvement in her skin lesions within three days. Follow-up brain MRI two weeks later showed decreased size and associated edema of the enhancing brain lesions. She was transitioned to oral voriconazole but was unable to achieve therapeutic levels and is now on oral posaconazole for a planned 12 month course, and is clinically stable.

Learning objectives:

Blastomycosis is caused by an endemic fungus found in decomposing wood and leaves primarily in the Ohio and Mississippi River Valleys and the Great Lakes region. Infection usually follows inhalations of spores and is typically localized to the lungs but approximately 30% of those infected will develop extra-pulmonary manifestations (1). Disseminated infection is more common in immunosuppressed populations, such as solid organ transplant recipients and HIV-infected individuals. Early recognition and treatment is essential to achieve best outcomes.

Lipid formulations of amphotericin B are the recommended treatment for blastomycosis in immunosuppressed patients. A 1-2 week course, or until clinical improvement is noted, is recommended, with step down to itraconazole therapy for 12 months thereafter (2). When central nervous system disease is present, a longer 4-6 week course of amphotericin B lipid formulation is recommended, followed by an oral azole for at least 12 months (2). The optimal azole for treatment remains debatable; voriconazole and posaconazole have excellent CNS penetration and have been used with success.

Image descriptions:

1. Erythematous papules and plaques, some with overlying erosion and crust, located on the cheek
2. Magnetic resonance image of brain showing multiple intraparenchymal, left frontal leptomeningeal and facial subcutaneous soft tissue enhancing foci suspicious for infectious blastomycosis
3. Fungal culture demonstrating mold with septate hyphae with round conidia at the apex of short and long conidiophores in a "lollipop-like" appearance, consistent with *Blastomyces dermatitidis*

References:

1. Crampton TL, Light RB, Berg GM, Meyers MP, Schroeder GC, Hershfield ES, Embil JM. Epidemiology and clinical spectrum of blastomycosis diagnosed at Manitoba hospitals. Clin Infect Dis 34: 1310–1316, 2002
2. Chapman SW, Dismukes WE, Proia LA, Bradsher RW, Pappas PG, Threlkeld MG, Kauffman CA. Clinical practice guidelines for the management of blastomycosis: 2008 update by the Infectious Disease Society of America. Clin Infect Dis 46: 1801–1812, 2008

(Images and text provided by Alden Michael Doyle, MD and Jessica Lewis, MD, University of Virginia, Charlottesville, Virginia)