On the Cover: The Miraculous Healing of Pietro de’ Ludovici from a Fever, 1501, by Gentile Bellini, (Italian, 1429–1507), oil on canvas, Galleria dell’Accademia, Venice, Italy, The Bridgeman Art Library International. Reproduced with permission.

The nobleman Pietro de’ Ludovici was suffering from a raging fever, which could have been the product of any one of several maladies, including malaria, common in Venice at the time. His fever diminished when he was brought to touch a candle. The relieved patient, a member of the Confraternity of San Giovanni, is shown in black, kneeling at an altar where a candle had been in contact with a famous relic, purported to have healing powers. The scene is the chapel of the Confraternity, with one wall removed, as in a theater.

The Confraternity of San Giovanni, a local religious guild located behind the Frari in Venice, had what was then believed to be a fragment of the True Cross. This revered object became so famous in Renaissance Venice that around 1490, in order to celebrate its prized possession, the Confraternity commissioned Gentile Bellini and his artistic entourage to execute a series of pictures to be hung like tapestries on its walls. The subjects of the paintings were miracles or other events surrounding the relic. Several other paintings in this series still exist, including two more by Gentile Bellini: Miracle of the Cross that Fell into the Canal of San Lorenzo (1500), and Procession of the True Cross in the Piazza San Marco (1496). All in the series are valuable documentations of the appearance and customs of Renaissance Venice.

(Mary & Michael Grizzard, Cover Art Editors)

1 September News

In the Literature

Crossing Borders: One World, Global Health

The section listed above, written by members of the CDC’s Division of Global Migration and Quarantine and focusing on globally mobile populations and infectious disease outbreaks, is freely available in this issue of Clinical Infectious Diseases online (http://cid.oxfordjournals.org).

ARTICLES AND COMMENTARIES

615 Does Doxycycline Protect Against Development of Clostridium difficile Infection?
Sarah B. Doernberg, Lisa G. Winston, Daniel H. Deck, and Henry F. Chambers

To determine whether doxycycline protects against development of Clostridium difficile infection (CDI), we studied a cohort of adult inpatients who received at least one dose of ceftriaxone. Addition of doxycycline was associated with low risk of CDI.

621 Doxycycline Improves Filarial Lymphedema Independent of Active Filarial Infection: A Randomized Controlled Trial
Sabine Mand, Alexander Yaw Debrah, Ute Klarmann, Linda Batsa, Yeboah Marfo-Debrekyei, Alexander Kwarteng, Sabine Specht, Aurea Belda-Domene, Rolf Fimmers, Mark Taylor, Ohene Adjei, and Achim Hoerauf

Treatment with doxycycline leads to improvement of filarial lymphedema independent of active infection (ie, patients positive or negative for circulating filarial antigen). Therefore, doxycycline (200 mg/d for 6 weeks) should be considered for patients with stage 1–3 lymphedema to improve morbidity management.

631 Impact of Peginterferon Alpha and Ribavirin Treatment on Lipid Profiles and Insulin Resistance in Hepatitis C Virus/HIV–Coinfected Persons: The AIDS Clinical Trials Group A5178 Study
Adeel A. Butt, Triin Umbleja, Janet W. Andersen, Kenneth E. Sherman, and Raymond T. Chung, for the ACTG A5178 Study Team

Peginterferon and ribavirin can significantly affect lipid profile and insulin resistance (IR) in hepatitis C virus/human immunodeficiency virus–coinfected persons. Although the lipid profile returns to near pretreatment levels after completion of treatment, our data suggest persistent modest improvement in IR with treatment.

639 Interferon Responsiveness Does Not Change in Treatment-Experienced Hepatitis C Subjects: Implications for Drug Development and Clinical Decisions
Jiang Liu, Jeffry Florian, Debra Bimkrant, Jeffrey Murray, and Pravin R. Jadhav

Authors quantitatively demonstrate that interferon responsiveness in pegylated interferon α-ribavirin (P/R)-experienced subjects administered a second course of P/R treatment was similar to the interferon responsiveness in the treatment-naive group with corresponding end-of-study status.
Entecavir Treatment of Chronic Hepatitis D
Gökhan Kabaçam, F. Öğüz Önder, Mustafa Yakut, Gülseren Sevcan, Senem C. Karatayli, Ersin Karatayli, Berna Sav aç, Ramazan Idilman, A. Mithat Bozdayi, and Cihan Yurd aydin
In this retrospective study, 1-year entecavir treatment of chronic delta hepatitis was ineffective. However, 3 of 13 patients showed a virologic response, which may be linked to shift of the dominant virus or, alternatively, to immune-mediated viral clearance.

Procalcitonin to Guide Initiation and Duration of Antibiotic Treatment in Acute Respiratory Infections: An Individual Patient Data Meta-Analysis
Philipp Schuetz, Matthias Briel, Mirjam Christ-Crain, Daiana Stolz, Lila Boudadma, Michel Wolff, Charles-Edouard Luyt, Jean Chastre, Florence Tubach, Kristina B. Kristoffersen, Long Wei, Olaf Burkhardt, Tobias Weite, Stefan Schroeder, Vandack Nobre, Michael Tamm, Neera Bhatnagar, Heiner C. Bucher, and Beat Mueller
This individual patient data meta-analysis of clinical trials investigating procalcitonin algorithms for antibiotic decision making found no increased risk of death or setting-specific treatment failure but did find significantly lower antibiotic exposure across different acute respiratory infections and clinical settings.

Arterolane Maleate Plus Piperaquine Phosphate for Treatment of Uncomplicated Plasmodium falciparum Malaria: A Comparative, Multicenter, Randomized Clinical Trial
Neena Valecha, Srivika Khrudsod, Noppadon Tangpukdee, Sanjib Mohanty, S. K. Sharma, P. K. Tyagi, Anupkumar Anvikar, Rajash Mohanty, B. S. Rao, A. C. Jha, B. Shahi, Jai Prakash Narayan Singh, Arjun Roy, Pawandeep Kaur, Monica Kothari, Shantanu Mehta, Anirudh Gautam, Jyoti K. Paliwal, Sudeshan Arora, and Nilanjan Saha
Arterolane, a rapidly acting synthetic trioxolane in combination with piperaquine, exhibits similar safety and efficacy to Coartem for the treatment of patients with uncomplicated P. falciparum malaria in a multicentre clinical trial in Thailand and India.

Placental Malaria is Associated With Increased Risk of Nonmalaria Infection During the First 18 Months of Life in a Beninese Population
Antoine Rachas, Agnès Le Port, Gilles Cottrell, José Guerra, Isabelle Choudat, Julie Bouscaillou, Achille Massougbodji, and André Garcia
Malaria placental infection was strongly associated with risk of nonmalaria infectious morbidity in 553 infants followed from birth to the age of 18 months in Benin.

Risk and Prognosis of Hospitalization for Pneumonia Among Individuals With and Without Functioning Renal Transplants in Denmark: A Population-Based Study
Lise H. Nielsen, Søren Jensen-Fangel, Bente Jespersen, Lars Østergaard, and Ole S. Søgaard
The risk of first-time hospitalization for pneumonia among renal transplant candidates and recipients is up to 10-fold higher than in the background population. Moreover, pneumonia in transplant recipients is associated with an excess risk of graft loss and significant mortality.
IMMUNOCOMPROMISED HOSTS

Transmission of Infection With Human Allografts: Essential Considerations in Donor Screening
Jay A. Fishman, Melissa A. Greenwald, and Paolo A. Grossi

Donor-derived transmission of infection to recipients of organ, tissue, and eye allografts is uncommon but potentially life-threatening. International standards for microbiological screening of donors vary. Risk factors for infection and opportunities for improved microbiological screening of allograft donors are reviewed.

HIV/AIDS

Sustained Virological Response to Interferon Plus Ribavirin Reduces Non–Liver-Related Mortality in Patients Coinfected With HIV and Hepatitis C Virus
Juan Berenguer, Elena Rodríguez, Pilar Miralles, Miguel A. Von Wichmann, José López-Aldeguer, Josep Mallolas, Maria J. Galindo, Eva Van Den Eynde, Maria J. Téllez, Carmen Quereda, Antoni Jou, José Sanz, Carlos Barros, Ignacio Santos, Federico Pulido, Josep M. Guardiola, Enrique Ortega, Rafael Rubio, Juan J. Jusdado, María L. Montes, Gabriel Gaspar, Herminia Esteban, José M. Bellón, Juan González-García and the GESIDA HIV/HCV Cohort Study Group

We observed that eradication of hepatitis C virus in patients coinfected with human immunodeficiency virus (HIV) was associated not only with a reduction in liver-related complications and mortality but also with a reduction in the progression of HIV infection and mortality not related to liver disease.

Frequent Emergence of N348I in HIV-1 Subtype C Reverse Transcriptase with Failure of Initial Therapy Reduces Susceptibility to Reverse-Transcriptase Inhibitors
Jessica H. Brehm, Dianna L. Koontz, Carole L. Wallis, Kathleen A. Shutt, Ian Sarne, Robin Wood, James A. McIntyre, Wendy S. Stevens, Nicolas Sluis-Cremer, and John W. Mellors; for the CIPRA-SA Project 1 Study Team

N348I emerges frequently with failure of first-line antiretroviral therapy (ART) in subtype C human immunodeficiency virus type 1 infection and affects susceptibility to nevirapine, efavirenz, etravirine, and zidovudine. This finding has implications for cross-resistance to subsequent ART regimens in resource-limited settings.

Iron Deficiency and Malaria Mortality: Possible Implication of Invasive Bacterial Diseases
Jessica Maltha and Jan Jacobs

Reply to Maltha and Jacobs
Jonathan D. Kurtis, Moses Gwamaka, Michal Fried, and Patrick E. Duffy

Clinical Scoring for Risk of Resistant Organisms in Pneumonia: Right Idea, Wrong Interpretation
Natalie Bowman, Neela Goswami, Christopher K. Lippincott, Michael J. Vinikoor, and William C. Miller

Reply to Chow et al
Amy C. Justice, Janet P. Tate, Matthew S. Freiberg, Maria C. Rodriguez-Barradas, and Russ Tracy

Long-term Comparative Immunogenicity of Protein Conjugate and Free Polysaccharide Pneumococcal Vaccines in Chronic Obstructive Pulmonary Disease
Mark T. Dransfield, Sarah Hamdan, Robert L. Burton, Richard K. Albert, William C. Bailey, Richard Casaburi, John Connnett, J. Allen D. Cooper, Jr, Gerard J. Criner, Jeffrey L. Curtis, Meilan K. Han, Barry Make, Nathaniel Marchetti, Fernando J. Martinez, Charlene McEvoy, Moon H. Nahm, Dennis D. Niewoehner, Janos Porszasz, John Reilly, Paul D. Scanlon, Steven M. Scharf, Frank C. Sciurba, George R. Washko, Prescott G. Woodruff, and Stephen C. Lazarus, for the NIH COPD Clinical Research Network

The Food and Drug Administration recently approved a diphtheria-conjugated pneumococcal polysaccharide vaccine for adults, although its long-term immunogenicity is unknown. We report that, in patients with moderate to severe chronic obstructive pulmonary disease, conjugate vaccination elicits a superior immune response to free-polysaccharide vaccine that persists for >2 years.

The electronic article listed above is freely available in this issue of Clinical Infectious Diseases online (http://cid.oxfordjournals.org/content/current).