

LYMEPOLICYWONK: Ringing out the old year: Stricker & Johnson Publications 2010

The world is changing around us and so is medical publication. Publication comes in two stripes these days. There is the old style print publication, which has restricted access. This means you either must be a subscriber to a publication, go to a medical library, or pay to have access to the article or letter. The newer style medical publication is called "open access" and is freely available for anyone to download. Both types are peer-reviewed. Last year, Dr. Stricker and I authored 10 publications that were peer reviewed. All are listed below. Four of the 10 are available open access. I have provided the links to either the abstract or the full article or letter where available. I hope you find them useful. Please share with me any thoughts or comments you have about them!

Stricker, R. and L. Johnson (2011). "[Lyme disease: The next decade.](#)" *IDR* 2011. You can read this full article without charge. The abstract follows:

*Although Lyme disease remains a controversial illness, recent events have created an unprecedented opportunity to make progress against this serious tick-borne infection. The antitrust action and subsequent review of the restrictive Lyme guidelines of the Infectious Diseases Society of America (IDSA) has confirmed the potential for persistent infection with the Lyme spirochete, *Borrelia burgdorferi*, as well as the complicating role of tick-borne coinfections such as *Babesia*, *Anaplasma*, *Ehrlichia*, and *Bartonella* species associated with failure of short-course antibiotic therapy. Furthermore, renewed interest in the role of cell wall-deficient (CWD) forms in chronic bacterial infection and progress in understanding the molecular mechanisms of biofilms has focused attention on these processes in chronic Lyme disease. Recognition of the importance of CWD forms and biofilms in persistent *B. burgdorferi* infection should stimulate pharmaceutical research into new antimicrobial agents that target these mechanisms of chronic infection with the Lyme spirochete. Concurrent clinical implementation of proteomic screening offers a chance to correct significant deficiencies in Lyme testing. Advances in these areas have the potential to revolutionize the diagnosis and treatment of Lyme disease in the coming decade.*

Stricker RB, Johnson L. [Lyme disease diagnosis and treatment: lessons from the AIDS epidemic](#). *Minerva Med.* 2010 Dec;101(6):419-25. The abstract is below, but the article is not available without charge.

Lyme disease is a controversial tick-borne illness that is estimated to be four times more common than AIDS in the United States. This paper outlines the challenges overcome in the healthcare response to human immunodeficiency virus (HIV) infection, the development of sensitive laboratory tests for the AIDS virus, and the promotion of long-term combination antimicrobial regimens to effectively treat HIV disease. We suggest that similar challenges need to be overcome before the chronic form of Lyme disease can be successfully treated. Currently, diagnosis and treatment of Lyme disease is hindered by the lack of a uniform case definition that adequately reflects the clinical presentation of the disease, poor laboratory test sensitivity, and high treatment failure rates using short-term monotherapy. Consequently the optimal treatment for patients with persistent symptoms of Lyme disease remains undefined. Although antibiotic monotherapy has been successful in treating early Lyme disease, the use of combination antibiotic therapy modelled on HIV treatment appears to be more effective for patients with persistent symptoms of tick-borne infection. Resolution of the controversy surrounding Lyme disease should lead to improved diagnosis and treatment modelled on the approach to HIV disease.

Johnson, L. and R. B. Stricker (2010). "[Final report of the Lyme disease review panel of the infectious diseases society of america: a pyrrhic victory?](#)" *Clin Infect Dis* 51(9): 1108-1109; author reply 1109-1101. You can read our full letter to the editor without charge.

Johnson, L. and R. B. Stricker (2010). "[The Infectious Diseases Society of America Lyme guidelines: a cautionary tale about the development of clinical practice guidelines.](#)" *Philos Ethics Humanit Med* 5: 9. This article is available free of charge. The abstract follows:

Flawed clinical practice guidelines may compromise patient care. Commercial conflicts of interest on panels that write treatment guidelines are particularly problematic, because panelists may have conflicting agendas that influence guideline recommendations. Historically, there has been no legal remedy for conflicts of interest on guidelines panels. However, in May 2008, the Attorney General of Connecticut concluded a ground-breaking antitrust investigation into the development of Lyme disease treatment guidelines by one of the largest medical societies in the United States, the Infectious Diseases Society of America (IDSA).

Although the investigation found significant flaws in the IDSA guidelines development process, the subsequent review of the guidelines mandated by the settlement was compromised by a lack of impartiality at various stages of the IDSA review process. This article will examine the interplay between the recent calls for guidelines reform, the ethical canons of medicine, and due process considerations under antitrust laws as they apply to the formulation of the IDSA Lyme disease treatment guidelines. The article will also discuss pitfalls in the implementation of the IDSA antitrust settlement that should be avoided in the future.

Stricker, R. B., C. L. Green, et al. (2010). "Safety of intravenous antibiotic therapy in patients referred for treatment of neurologic Lyme disease." *Minerva Med* **101**(1): 1-7. The abstract is below, but the article is not available without charge.

*AIM: Although intravenous antibiotic therapy is recommended for neurologic Lyme disease, safety concerns have been raised about treatment beyond 30 days in patients with persistent neurologic symptoms. The goal of our study was to evaluate the safety of extended intravenous antibiotic therapy in patients referred for treatment of neurologic Lyme disease. METHODS: We enrolled 200 consecutive patients with significant neurologic symptoms and positive testing for *Borrelia burgdorferi*. Patients were treated with intravenous antibiotics using various intravascular devices (IVDs). Standard IVD care was administered to all patients, and monitoring for medication reactions and IVD complications was performed on a weekly basis. RESULTS: The mean length of intravenous antibiotic treatment was 118 days (range, 7-750 days) representing 23,654 IVD-days. Seven patients (3.5%) experienced allergic reactions to the antibiotic medication, and two patients (1.0%) had gallbladder toxicity. IVD complications occurred in 15 patients (7.5%) representing an incidence of 0.63 per 1,000 IVD-days. The IVD problems occurred an average of 81 days after initiation of treatment (range, 7-240 days). There were six suspected line infections for an incidence of 0.25 per 1,000 IVD-days. Only one of the IVD infections was confirmed, and no resistant organisms were cultured from any patient. None of the IVD complications were fatal. CONCLUSION: Prolonged intravenous antibiotic therapy is associated with low morbidity and no IVD-related mortality in patients referred for treatment of neurologic Lyme disease. With proper IVD care, the risk of extended antibiotic therapy in these patients appears to be low.*

Stricker, R. B. and L. Johnson (2010). "Letter to the editor re "Anti-neural antibody reactivity in patients with a history of Lyme borreliosis and persistent symptoms" by Chandra et al." Brain Behav Immun **24**(6): 1025; author reply 1026. This letter is not available free of charge.

Stricker, R. B. and L. Johnson (2010). "Long-term outcomes in patients with early Lyme disease: more false hope?" Clin Infect Dis **50**(12): 1683-1684; author reply 1684. This letter is not available free of charge.

Stricker, R. B. and L. Johnson (2010). "[The Lyme disease chronicles, continued. Chronic Lyme disease: in defense of the patient enterprise.](#)" FASEB J **24**(12): 4632-4633; author reply 4633-4634. The full text of the letter is available online without charge.

Stricker, R. B. and L. Johnson (2010). "Persistent symptoms following treatment of early Lyme disease: false hope?" Am J Med **123**(8): e25; author reply e27-28. This letter is not available free of charge.

Stricker, R. B. and L. Johnson (2010). "'Rare' infections mimicking multiple sclerosis: Consider Lyme disease." Clin Neurol Neurosurg. This letter is not available free of charge.

You can follow additional comments on Lyme policy at www.lymepolicywonk.org. You can contact Lorraine Johnson, JD, MBA at lbjohnson@lymedisease.org.