

The conflict on posttreatment Lyme disease syndrome: a clinical mini review

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ABSTRACT

Is *Borrelia burgdorferi* responsible for the persistence of symptoms after the standard successful course of antibiotics in Lyme disease patients? This highly controversial issue, concerning the underlying mechanism of posttreatment Lyme disease syndrome (PTLDS), still seems to be a matter of intense conflict of opinion. PTLDS is the manifestation of nonspecific symptoms including fatigue, musculoskeletal pain, dysesthesias, and neurocognitive deterioration after the standard antimicrobial therapy administered to patients suffering from Lyme disease. In this article, we review the conflicting views and published highlights of recent human studies regarding PTLDS.

Key words: Antibiotic therapy; duration of therapy; Lyme disease; nonspecific symptoms; posttreatment Lyme disease syndrome

INTRODUCTION

There is no fundamentally widely accepted definition of posttreatment Lyme disease syndrome (PTLDS). This has led to confusion and controversies and to a lack of data on its incidence, prevalence, and pathogenesis. The most accepted definition is that PTLDS is the manifestation of nonspecific signs and symptoms such as fatigue, muscle pain, arthropathy, neuropathy, and cognitive dysfunction after the standard course of antibiotics that are administered to patients between 10 and 28 days depending on disease stage and severity. It is expected that this syndrome persists for at least 6 months. Additionally, all indicated known diagnostic workup regarding neuroborreliosis has to be negative.^[1,2] A sufficient amount of data shows that patients with PTLDS have reduced life functioning than those without the syndrome,^[3] or even when compared to patients with other chronic diseases.^[4] Intuitively, the presence of PTLDS after recommended

treatment is associated with significantly increased health care costs.^[5]

NOT TO TREAT PTLDS

The Infectious Diseases Society of America (IDSA) reported that Lyme disease is not always properly diagnosed or treated and that some patients may continue to experience prolonged Lyme disease symptoms even after an intense chemotherapeutic regimen. The diagnosis of so-called “chronic Lyme disease”, implying an ongoing infection, is not supported by scientific evidence and the treatment based on long-term chemotherapy is not recommended. Standard courses of antibiotics, between 10 and 28 days depending on the manifestation of Lyme disease, have been proven effective to cure the infection. These chronic symptoms may be due to persisting inflammatory responses to bacterial debris by genetically predisposed individuals after the resolution of the infection, as well as due to joint damages caused by the initial infection.^[1] Some already treated patients

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