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Relapsing Neuroborreliosis

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We would like to make some comments regarding the interesting article by Lawrence et al. [1], recently published in the journal. One of us (J.V.S.L.) is a case of chronic neuroborreliosis with cardiac and muscular-articular affectation. He had considerable digestive symptomatology. He also showed seronegative with seric immune complexes positive for *Borrelia burgdorferi*. There was no determination of immune complexes in spinal fluid [2]. Since 1991, he has undergone 7 short-term antibiotic treatments lasting about 2 years, of the type indicated by the Center for Disease Control (CDC), which is almost unanimously recommended in the literature [2]. With these treatments he could only achieve transitory improvements and his physical state and quality of life impaired progressively and seriously. Since 1993, he has been treated continuously with various antibiotics [3], having improved considerably his quality of life. His digestive disorder has disappeared and there has been a decrease in his general manifestations (asthenia, slight fever), as well as neurologic (loss of muscular mass, fasciculations, discomfort, dizziness, drowsiness, sensation of cephalic occupation, cephelea, stress, physical and psychic slowness, difficulty to fall asleep, quick sensations of invading discomfort when trying to fall asleep), cardiac (arrhythmias, palpitations) and muscular-articular (muscular-articular pain) symptomatology. The case referred to by Lawrence [1] is a faithful image of the diagnostic difficulties in Lyme borreliosis. In spite of the progress that the PCR technique represents, false-negative results are still considerable [5], so that even today diagnosis is mainly clinical [6]. Unfortunately, the case mentioned by Lawrence adds to the long and increasing list of chronic patients with persistence of *B. burgdorferi* in the organism after weeks or months of antibiotic treatment [4, 6, 7]. We would like to point out only two aspects from the analysis of these cases: the persistence of the CDC in recommending short-term antibiotic treatment to chronic patients, and, by contrast, the clinically proven need to administer long courses of antibiotic treatment [6, 7], analytically confirmed in some patients by culture or PCR [6, 8]. Antibiotic treatment should be carried out as long as necessary, until cure is achieved or, in its absence, until patients recover the possibility to enjoy their lives again and permanently [4, 6, 7]. No doubt an antibiotic iatrogenic is better than a borrelia ‘iatrogenic’. We were happy to learn that Dr. P.K. Coyle, who used not to administer long-term antibiotic treatment to chronic patients [8], now supports it. Finally, we would like to ask two questions: (1) Even accepting the hypothesis that a given HLA genetic type might predispose to a chronic course, should not the patient’s humoral and cellular immunity be evaluated to detect any alterations which could have hindered the formation of enough antibodies and/or allowed the survival of the borrelias in the macrophages?, and (2) In patients with infections with poor response to antibiotic treatment, would it be justified to add cytokines (interferon-γ and/or macrophage colony stimulating factor) to increase the bactericidal action of the macrophages? Refractory infections caused by other intracellular pathogens are being treated by cytokines with encouraging results [9].

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