How can doctors determine if patients with systemic autoimmune joint disease following Lyme disease don’t have a persistent infection?

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The patients were prescribed anti-inflammatory therapies, primarily disease-modifying anti-rheumatic drugs (DMARDs). "These treatments included steroids (3%), NSAIDS (20%), disease-modifying anti-rheumatic drugs (DMARDs) (57%), most commonly methotrexate, but also TNF-inhibitors, or combinations of these agents," reported Arvikar. [1]

The authors assumed that the persistent Borrelia burgdorferi (Bb) infection had been eradicated. "All 30 patients had been treated with antibiotic regimens for Lyme disease, as recommended by the Infectious Diseases Society of America (IDSA)," Arvikar pointed out. "Generally, this consisted of a 21-day course of oral doxycycline for early Lyme disease, but 13 of the 24 patients (54%) with early Lyme disease received additional courses of oral antibiotic therapy, with a maximum of 4 months of treatment." [1]

Physicians prescribing DMARD medications, however, cannot be completely sure that a persistent infection has cleared. There are numerous studies documenting chronic manifestations of Lyme disease. Logigian and colleagues have described Lyme disease (LD) patients with chronic neurologic symptoms up to 14 years after antibiotic treatment. [2] Other studies have reported Post-treatment Lyme Disease Syndrome (PTLDS) in patients years after treatment for Lyme disease. [3]

If patients still have an active infection and begin a treatment regime which includes steroids or DMARD drugs, long-term outcomes could be worse. [4-6] Furthermore, biological DMARDs have been associated with a higher rate of serious infections, as compared to other DMARDs. [7]

DMARDs are intended to slow down disease progression. Synthetic DMARDs include methotrexate and sulfasalazine. Biological DMARDs include the tumor necrosis factor alpha (TNF?) blockers infliximab (Remicade®), interleukin 1 blockers anakinra (Kineret®), monoclonal antibodies against B cells, such as rituximab, and the T cell costimulation blocker abatacept (ORENCIA®).

It is important for doctors to be sure any persistent infections have resolved before prescribing steroids or DMARDs in patients presenting with a systemic autoimmune joint disease after a history of Lyme disease. It would also be reasonable to include patients in the discussion when prescribing steroids or DMARDs to allow shared decision making.

References:

1. Arvikar SL, Crowley JT, Sulka KB, Steere AC. Autoimmune Arthritides, Rheumatoid Arthritis, Psoriatic Arthritis, or Peripheral Spondyloarthropathy, Following Lyme Disease. Arthritis & rheumatology. 2016.
2. Logigian EL, Kaplan RF, Steere AC. Chronic neurologic manifestations of Lyme disease. N Engl J Med. 1990;323(21):1438-1444.
3. Weitzner E, Visintainer P, Wormser GP. Comparison of males versus females with culture-confirmed early Lyme disease at presentation and at 11-20 years after diagnosis. Diagn Microbiol Infect Dis. 2016.
4. Jowett N, Gaudin RA, Banks CA, Hadlock TA. Steroid use in Lyme disease-associated facial palsy is associated with worse long-term outcomes. Laryngoscope. 2016.
5. Dattwyler RJ, Halperin JJ, Volkman DJ, Luft BJ. Treatment of late Lyme borreliosis--randomised comparison of ceftriaxone and penicillin. Lancet. 1988;1(8596):1191-1194.
6. Steere AC, Green J, Schoen RT, et al. Successful parenteral penicillin therapy of established Lyme arthritis. N Engl J Med. 1985;312(14):869-874.
7. Singh JA, Cameron C, Noorbaloochi S, et al. Risk of serious infection in biological treatment of patients with rheumatoid arthritis: a systematic review and meta-analysis. Lancet. 2015;386(9990):258-265.

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