

Lyme disease can lead to long-term sequelae

Wednesday, April 22, 2020

<https://danielcameronmd.com/lyme-disease-long-term-sequelae/>

The Canadian authors point out that in their country alone the number of Lyme disease cases has increased 14-fold over an 8 year period (2009-2017). They reviewed studies published between 1994 and 2019 to assess the extent of long-term sequelae due to Lyme disease. Based on eligibility criteria, 21 studies were included in the analysis, two-thirds of those were from the U.S.

[The study found](#), “based on 21 studies reporting attributable outcomes, higher proportions of sequelae reported from exposed patients were: neck pain, myalgia, arthralgia, paresthesia, sleep disorder, poor appetite, and concentration difficulties.”¹

North America vs. Europe

Interestingly, when comparing patients from North America vs. Europe, the authors found: “a higher proportion of exposed patients from North America reported depression, memory difficulties, and numbness, whereas a higher proportion of exposed patients from the European Union reported paresthesia and facial nerve palsy.”

More specifically, North American patients reported: weakness, neck pain, myalgia, fatigue, arthralgia, numbness/tingling, sleep disorder, memory difficulties, emotional fluctuation, word-finding, depression, and concentration difficulties.

Meanwhile, European patients reported: neck pain, myalgia, arthralgia, paresthesia, facial nerve palsy, sleep disorder, poor appetite, and concentration difficulties.

Patient results: Post-treatment Lyme disease Syndrome (PTLDS)

“Approximately 10–20% of patients with LD continue to experience persistent fatigue, musculoskeletal and cognitive symptoms after standard antibiotic treatment, for 6 months or longer, termed PTLDS,” the authors write.

These patients reported higher levels of fatigue (79% vs 16%), depression (69% vs 20%), and arthralgia (67% vs 28%).

Exposed patients were also more likely to suffer from neck pain, fatigue, coordination issues, sleep difficulties, memory difficulties, word-finding, and concentration difficulties than individuals without Lyme disease.

“Although these sequelae are considered nonspecific and common to many health conditions for primary care patients, our review suggests that patients with PTLDS do experience long-term subjectively reported sequelae,” Mac concludes.

“Current hypotheses explore the idea that patients thought to have PTLDS may, in fact, have symptoms from another health condition that are misattributed to PTLDS.”

The authors suggest that there might be an anchoring bias. [Anchor bias](#) occurs when a doctor places too much emphasis on the initial diagnosis of Lyme disease.

Editor's note:

Too many doctors continue to dismiss subjective symptoms of Lyme disease.

Some studies report that patients were well on long-term follow-up. For example, Wormser did not find chronic illness if Lyme disease patients were treated earlier.

Mac and colleagues did address a number of other examples of chronic manifestations of Lyme disease. The list includes Lyme encephalopathy, Lyme neuropathy, postural orthostatic tachycardia syndrome (POTS), Pediatric Acute-onset Neuropsychiatric Syndrome (PANS), and neuropsychiatric Lyme disease.

Related Articles:

[Perspective: Risk for Lyme disease patients during a COVID-19 pandemic](#)

[Study finds misdiagnosis and delayed diagnosis common for Lyme disease patients](#)

[Podcast: 4 Lyme disease patients develop PTLDS](#)

References:

1. Mac S, Bahia S, Simbulan F4, Pullenayegum EM, Evans GA, Patel SN, Sander B. Long-term sequelae and health-related quality-of-life associated with Lyme disease: A systematic review. Clin Infect Dis. 2019 Nov 27.

Lyme disease can lead to long-term sequelae - <https://danielcameronmd.com/lyme-disease-long-term-sequelae/>