

Number of post-treatment Lyme disease cases expected to soar

Sunday, August 18, 2019

<http://danielcameronmd.com/post-treatment-lyme-disease-cases-expected-soar/>

For a significant number of patients with Lyme disease, standard antibiotic treatment does not work. In fact, recent studies [1-3] have shown that treatment failure rates may range between 10% and 20%, [writes DeLong and colleagues. \[4\]](#)

These patients can continue to suffer for years with debilitating symptoms, including pain, fatigue, cognitive dysfunction, and other symptoms, the authors explain. However, the prevalence of post-treatment Lyme disease cases is unknown.

In an effort to understand the pervasiveness of PTLTD, the authors estimated the number of cases in 2016 and 2020 using Monte-Carlo simulation technique, along with publicly available data.

The authors found that in 2016 the prevalence of PTLTD ranged from 69,011 people to more than one million (1,523,869). (This is assuming a 20% risk.)

“The number of cases of PTLTD is estimated to be 1,523,869 based on the actual number of cases in the USA every year and a liner increase in new cases after 2005,” writes DeLong.

In 2020, the prevalence of post-treatment Lyme disease cases is expected to be even higher, possibly reaching at least 1,944,189 cases. (This is assuming a 20% risk.)

“The cumulative prevalence of [post-treatment Lyme disease] in the United States is estimated to be high and continues to increase,” the study finds.

The number of cases of PTLTD assuming a 20% risk:

Is estimated to be 138,540 based on cases reported to the Centers for Disease Control and Prevention (CDC);

Is estimated to be 1,351,180 based on the actual number of cases in the USA every year and no increase in new cases after 2005.

The number of cases of PTLTD assuming a 10% risk:

Is estimated to be 68,603 based on cases reported to the CDC;

Is estimated to be 671,876 based on the actual number of cases in the USA every year and no increase in

new cases after 2005;

Is estimated to be 758,776 based on the actual number of cases in the USA every year and a liner increase in new cases after 2005.

Conclusions:

“Our findings suggest that there are large numbers of patients living with [Lyme disease]-related chronic illness.”

“Due to the lack of a single case definition or single, shared phenotype for PTLDS, private and public health insurance does not include the costs of caring for these individuals, who must personally pay for these expenses.”

Editor's note: The authors remind the readers that children ages 5 to 9, and particularly boys, are at a high risk of Lyme disease. A high prevalence of "PTLDS" cases would surely be a huge emotional and financial strain on parents, as well as a burden to the school system.

I am reluctant to use the term “PTLDS” until there is a reliable test to rule out a persistent infection.

Related Articles:

[Sick for years with post-treatment Lyme disease syndrome](#)

[Lyme disease can cost billions](#)

[Level with Lyme disease patient: At least 1 in 3 can fail treatment](#)

References:

1. Feder HM, Jr., Johnson BJ, O'Connell S, et al. A critical appraisal of "chronic Lyme disease". N Engl J Med. 2007;357(14):1422-1430.
2. Rebman AW, Bechtold KT, Yang T, et al. The Clinical, Symptom, and Quality-of-Life Characterization of a Well-Defined Group of Patients with Posttreatment Lyme Disease Syndrome. Front Med (Lausanne). 2017;4:224.
3. Marques A. Chronic Lyme disease: a review. Infect Dis Clin North Am. 2008;22(2):341-360, vii-viii.
4. DeLong A, Hsu M, Kotsoris H. Estimation of cumulative number of post-treatment Lyme disease cases in the US, 2016 and 2020. BMC Public Health. 2019;19(1):352.

Number of post-treatment Lyme disease cases expected to soar - 08-18-2019

by Dr. Daniel Cameron - Daniel Cameron, MD, MPH - <http://danielcameronmd.com>

Latest From the Lyme Disease Science Blog

Number of post-treatment Lyme disease cases expected to soar - <http://danielcameronmd.com/post-treatment-lyme-disease-cases-expected-soar/>