

## **Lyme disease and depression case**

**Wednesday, August 05, 2020**

<https://danielcameronmd.com/16-year-old-boy-lyme-disease-presenting-depression/>

[One study found a high prevalence of depression](#) in Lyme disease patients. Between January 2008 and December 2014, 1 in 5 patients treated at the Lyme Center Apeldoorn in the Netherlands was diagnosed with depression and Lyme disease. <sup>1</sup>

Meanwhile, Dr. Robert Bransfield, a psychiatrist specializing in the diagnosis and treatment of tick-borne illnesses, reports "In my database, depression is the most common psychiatric syndrome associated with late-stage Lyme disease."

"I estimate that there are at least 1,200 people per year who commit suicide as the result of Lyme disease," Bransfield writes in his article "[Suicide, Lyme and Associated Diseases.](#)" <sup>2</sup>

*Borrelia burgdorferi*, the causative agent of Lyme disease, "may be diagnosed as a persistent infection with immune suppressant and evasive capabilities or there may be a postinfectious process," Bransfield writes. "In either case, the psychiatric symptoms are associated with an immune-mediated process."

Brian Fallon, MD, director of the Lyme and Tick-Borne Diseases Research Center at Columbia University, describes the case of a 16-year-old adolescent who presented with long-standing depression, which suddenly worsened.<sup>3</sup>

### **Neuropsychiatric symptoms**

He reported anger, frustration, insomnia, poor appetite, mild weight loss, and passive suicidal ideation. He would say, "I wish I could just die in my sleep."

The boy complained of brain fog and had a steep decline in cognitive abilities. His symptoms were initially presumed to be caused by "either laziness or mild depression." He suffered from ongoing knee pain and was forced to quit sports.

His grades dropped from "A's" in 7th grade to nearly failing by 10th grade. He suffered from fatigue and forgetfulness. "He appeared lazy because he found it hard to get out of bed in the morning," Fallon writes.

The boy's symptoms were extensive and included:

- severe headaches
- facial fasciculations, myalgias
- stiff neck
- hyperacusis
- episodic paresthesias of his face and hands
- sudden sweating

- painful joints
- sore throats
- palpitations
- electric shock-like pains
- word-finding problems, such that it was hard to finish sentences
- semantic paraphasias
- short-term memory problems, such that he could not recall conversations
- testicular pain

Since he reported having embedded ticks in the past, Lyme disease was clinically diagnosed “given the suspicious clinical history.”

His Lyme ELISA results were negative twice in the prior 3 months, but his IgG Western blot revealed 4 of the 5 requisite CDC specific bands. A brain SPECT revealed findings consistent with encephalitis, vasculitis, and Lyme disease.

### **Treatment response**

The boy was diagnosed with probable Lyme encephalopathy and treated with 12 weeks of intravenous ceftriaxone.

He improved on sleep, appetite, headaches, joint pains, numbness, distractibility, short-term memory, and emotional behavior. His depression cleared without the need for antidepressant medications. His IQ improved by 22 points, and his school performance markedly improved.

### **Related Articles:**

[Don't confuse somatic symptoms with depression in early Lyme disease](#)

[Chronic neurological Lyme disease or co-morbid conditions?](#)

[Oppositional behavior in children with Lyme disease](#)

### **References:**

1. Zomer, T.P., et al., Depressive Symptoms in Patients Referred to a Tertiary Lyme Center: High Prevalence in Those Without Evidence of Lyme Borreliosis. *Clin Infect Dis*, 2017. 65(10): p. 1689-1694.
2. Bransfield RC. Suicide and Lyme and associated diseases. *Neuropsychiatr Dis Treat*. 2017;13:1575-1587. Published 2017 Jun 16. doi:10.2147/NDT.S136137.
3. Fallon BA, Kochevar JM, Gaito A, Nields JA. The underdiagnosis of neuropsychiatric Lyme disease in children and adults. *Psychiatr Clin North Am*. 1998;21(3):693-703, viii.

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