

## Oppositional behavior in children with Lyme disease

Thursday, August 02, 2018

<http://danielcameronmd.com/oppositional-behavior-in-children-with-lyme-disease/>

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As [Dr. Richard Bransfield explains](#) in *Neuropsychiatric Disease Treatment*, “Lyme disease and the immune, biochemical, neurotransmitter, and the neural circuit reactions to [Lyme disease] can cause impairments associated with violence.” [1]

Children with serologic evidence of a tick-borne illness can also develop severe oppositional defiant behaviors, according to Dr. Rosalie Greenberg, a child and adolescent psychiatrist, who runs a private practice in New Jersey.

Out of [69 youths evaluated at Dr. Greenberg’s practice](#), 49 (or 2/3) were positive by blood tests for one or more tick-borne illnesses including Lyme disease, Bartonella, Babesia, Ehrlichia and Anaplasmosis.

“I have seen a number of children and adolescents who exhibit significant acute or gradual onset of highly oppositional behaviors often both at home and at school,” she says.

Several examples include:

- Refusal to do class work or homework
- Heightened paranoia or feeling rejected by others
- Increased irritability
- Extreme temper tantrums
- Problems concentrating
- Elevated impulsivity
- Sensory hypersensitivity (sound, touch, smell, taste and/or light)
- Intense emotional lability

Patients also exhibited bouts of rage. “During periods of intense anger over minimal issues, they can appear menacing and threaten to kill a sibling, parent or a friend or state that they want to die themselves,” Greenberg says.

The onset or presentation of the oppositional behavior varied. “Parents describe these behaviors as either a sudden change or a period of worsening of a previous condition, such as [attention-deficit hyperactivity disorder](#) or mood disorder,” she explains.

Over the past several years, researchers have found that infections and illnesses, including Lyme disease, can induce an [autoimmune reaction](#) which is characterized by a dramatic onset of neuropsychiatric symptoms. When this occurs, [individuals may be diagnosed](#) with pediatric acute-onset neuropsychiatric syndrome (PANS) or an infection-triggered autoimmune encephalopathy, which requires treatment to

correct the immune dysfunction.

Dr. Bransfield's and Dr. Greenberg's observations will need to be studied further to prove a direct correlation between tick-borne illnesses and aggression and oppositional behaviors. Until then, it would be reasonable to consider a tick-borne illness as a potential underlying cause of extreme oppositional behaviors.

Editor's note: I have treated both middle and high school students with Lyme disease who exhibited severe oppositional behavior.

### **Related Articles:**

[Suicidal behaviors in patients with Lyme and associated diseases](#)

[16-year-old boy with Lyme disease presenting as depression](#)

[Video: Is Lyme disease an autoimmune disease?](#)

### **References:**

1. Bransfield RC. Aggressiveness, violence, homicidality, homicide, and Lyme disease. *Neuropsychiatr Dis Treat.* 2018;14:693-713.
2. Greenberg R. Aggressiveness, violence, homicidality, homicide, and Lyme disease. *Neuropsychiatr Dis Treat.* 2018;14:1253-1254.

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