

RESEARCH

Evidence Mounts Implicating Lyme Disease in the Autism Epidemic

<http://www.prweb.com/releases/Autism/Lyme+Disease/prweb567605.htm>

PRWEB - A new article in Medical Hypotheses, "The association between tick-borne infections, Lyme Borreliosis and autism spectrum disorders" was released this week. Robert Bransfield, M.D., the main author collaborated with top doctors in both fields on this paper such as Jeff Wulfman, M.D., William T. Harvey, M.D. and Anju Usman, M.D.

The summary of the article states that "Chronic infectious diseases, including tick-borne infections such as *Borrelia burgdorferi* may have direct effects, promote other infections and create a weakened, sensitized and immunologically vulnerable state during fetal development and infancy leading to increased vulnerability for developing autism spectrum disorders."

Bransfield et al, examine clinical observations, case reports, laboratory testing of patients with Autism Spectrum Disorder for tick-borne diseases, brain imaging results, epidemiological findings, infections and autism, tick-borne/Borreliosis infections and psychiatric illness and many other factors in this collaboration of research findings.

Numbers indicate that 20-30% of children with Autism Spectrum Disorder may be infected with Lyme Borreliosis and pathogenic *Mycoplasma* may be a contributor in 58% of cases. With these staggering numbers, families and physicians need education on the proper testing and treatment methods currently available. With these 20-30% numbers representing around 140,000 cases of autism in the United States alone, the human impact of this disease is staggering. Bransfield et al states that "If just 20% of the 560,000 recognized cases of ASD in the US can be prevented or more effectively treated, this could result in a savings of \$358 billion in addition to the incalculable human impact of this disease."

The authors recognized the contributions of Charles Ray Jones, M.D. for decades of expertise and dedication in helping hundreds of children with Lyme Borreliosis and autism spectrum disorder.

Parents needing more information on testing and treatment can turn to the LIA Foundation for support. They are a non-profit organization which focuses on research, awareness and education on the multiple infections, including *Borrelia/Lyme Disease*, and how that impacts children with Autism Spectrum Disorder.

Study Abstract:

The Association Between Tick-Borne Infections, Lyme Borreliosis and Autism Spectrum Disorders

Robert C. Bransfield*, Jeffrey S. Wulfman, William T. Harvey, Anju I. Usman
Med Hypotheses (2007), doi:10.1016/j.mehy.2007.09.006

Summary Chronic infectious diseases, including tick-borne infections such as *Borrelia burgdorferi* may have direct effects, promote other infections and create a weakened, sensitized and immunologically vulnerable state during fetal development and infancy leading to increased vulnerability for developing autism spectrum disorders. A dysfunctional synergism with other predisposing and contributing factors may contribute to autism spectrum disorders by provoking innate and adaptive immune reactions to cause and perpetuate effects in susceptible individuals that result in inflammation, molecular mimicry, kynurenine pathway changes, increased quinolinic acid and decreased serotonin, oxidative stress, mitochondrial dysfunction and excitotoxicity that impair the development of the amygdale and other neural structures and neural networks resulting in a partial Kluver-Bucy Syndrome and other deficits resulting in autism spectrum disorders and/or exacerbating autism spectrum disorders from other causes throughout life.

Support for this hypothesis includes multiple cases of mothers with Lyme disease and children with autism spectrum disorders; fetal neurological abnormalities associated with tick-borne diseases; similarities between tick-borne diseases and autism spectrum disorder regarding symptoms, pathophysiology, immune reactivity, temporal lobe pathology, and brain imaging data; positive reactivity in several studies with autistic spectrum disorder patients for *Borrelia burgdorferi* (22%, 26% and 20–30%) and 58% for mycoplasma; similar geographic distribution and improvement in autistic symptoms from antibiotic treatment. It is imperative to research these and all possible causes of autism spectrum disorders in order to prevent every preventable case and treat every treatable case until this disease has been eliminated from humanity.

(Thanks to Stan Kurtz.)