

Peer Reviewed Evidence of Persistence of Lyme Disease Spirochete *Borrelia burgdorferi* and Tick-Borne Diseases

The following is a list of over 700 peer reviewed articles that support the evidence of persistence of Lyme and other tick-borne diseases. It is organized into different categories—general, psychiatric, dementia, autism and congenital transmission.

General: Persistence of Lyme Disease Spirochete *Borrelia burgdorferi*

The following section of references for persistence of Lyme disease (Lyme borreliosis) are listed alphabetically and chronologically:

1. Aalto A, Sjowall J, Davidsson L, Forsberg P, Smedby O. Brain magnetic resonance imaging does not contribute to the diagnosis of chronic neuroborreliosis. *Acta Radiol* 2007; 48: 755-762. [white matter hyperintensities or basal ganglia lesions].
2. Abele DC and Anders KH. The many faces and phases of borreliosis. *J Am Acad Dermatol* 1990; 23:401-410. [chronic Lyme borreliosis].
3. Aberer E and Klade H. Cutaneous manifestations of Lyme borreliosis. *Infection* 1991; 19: 284-286. [chronic Lyme borreliosis].
4. Aberer E, Breier F, Stanek G, and Schmidt B. Success and failure in the treatment of acrodermatitis chronica atrophicans skin rash. *Infection* 1996; 24: 85-87.
5. Aberer E, Kersten A, Klade H, Poitschek C, Jurecka W. Heterogeneity of *Borrelia burgdorferi* in the skin. *Am J Dermatopathol* 1996; 18(6): 571-519.
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16. Barthold S. Lyme borreliosis. Chapter 14, *In Persistent Bacterial Infections*. Edited by J.P. Nataro, M.J. Blaser, and S. Cunningham-Rundles, pp 281-304. ASM Press, Washington, D.C.
17. Barthold SW, Hodzic E, Imai DM, Feng S, Yang X, and Luft BJ. Ineffectiveness of tigecycline against persistent *Borrelia burgdorferi*. *Antimicrob Agents Chemother* 2010; 54(2): 643-651. [mice, rats, white-footed mice, hamsters, gerbils, guinea pigs, rabbits, dogs, nonhuman primates, and humans]
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This section compiled by: John D. Scott, Research Division, Lyme Ontario, February 2015

Psychiatric Symptoms and Lyme/Tick-Borne Diseases

This section is organized alphabetically by the title of the article.

A controlled study of deficits in children with chronic Lyme disease. **AUTHORS:** Tager, F., Fallon, B., Keilp, J, Rissenberg, M., Jones, C.R. & Liebowitz, M. **SOURCE:** *Journal of Neuropsychiatry and Clinical Neurosciences*, 2001; 13: 500-507.

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Acute and chronic pain associated with Lyme borreliosis: clinical characteristics and pathophysiologic mechanisms. **AUTHORS:** Zimering JH, Williams MR, Eiras ME, Fallon BA, Logigan EL, Dworkin RH et al. **SOURCE:** *Pain*. 2014 Aug;155(8):1435-1438.

[Acute and chronic neuroborreliosis with and without CNS involvement: a clinical, MRI, and HLA study of 27 cases](#). **AUTHORS:** Krüger H, Heim E, Schuknecht B, Scholz S. **SOURCE:** *J Neurol*. 1991 Aug;238(5):271-80.

Acute Lyme Neuroborreliosis With Transient Hemiparesis and Aphasia **AUTHORS:** Sokolov A, Lienhard R, Du Pasquier R, Véronique Erard V **SOURCE:** Annals of Emergency Medicine. Published Online: February 25, 2015 [http://www.annemergmed.com/article/S0196-0644\(15\)00028-1/abstract](http://www.annemergmed.com/article/S0196-0644(15)00028-1/abstract)

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<http://blogs.nejm.org/now/index.php/a-girl-with-seizures/2015/05/22/comment-page-1/#comment-225701> A Groundhog, a Novel Bartonella Sequence, and My Father's Death **AUTHORS:** Breitschwerdt EB, Maggi RG, Cadena MB, Vissotto de Paiva Diniz PP **SOURCE:** Emerging Infectious Diseases • www.cdc.gov/eid • 2009 Aug;15(12): 2080-6 <http://www.cdc.gov/eid/content/15/12/pdfs/2080.pdf>

Alcohol and epilepsy: A case report between alcohol withdrawal seizures and neuroborreliosis. **AUTHORS:** Gheorghiev C, De Montleau F, Defuentes G **SOURCE:** *Encephale* 2011 06; 37 (3): 231-237

[Alcohol and epilepsy: a case report between alcohol withdrawal seizures and neuroborreliosis]. **AUTHORS:** Gheorghiev C, De Montleau F, Defuentes G. **SOURCE:** *Encephale*. 2011 Jun;37(3):231-7.

[Altered mental status, an unusual manifestation of early disseminated Lyme disease: A case report](#). **AUTHORS:** Chabria SB, Lawrason J. **SOURCE:** *J Med Case Reports*. 2007 Aug 9;1:62.

Alzheimer's disease and infection: Do infectious agents contribute to progression of Alzheimer's disease? **AUTHORS:** Honjo K, van Reekum R, Rand Nicolaas, Verhoeff NPLG. **SOURCE:** *Alzheimer's and Dementia*. Vol 5;4, July 2009, p 348-360

Alzheimer's disease - a neurospirochetosis. Analysis of the evidence following Koch's and Hill's criteria. **AUTHOR:** Miklossy J. **SOURCE:** *J Neuroinflammation*. 2011 Aug 4;8(1):90. [Epub ahead of print]

[Alzheimer's disease Braak Stage progressions: reexamined and redefined as Borrelia infection transmission through neural circuits](#). **AUTHOR:** MacDonald AB. **SOURCE:** *Med Hypotheses*. 2007;68(5):1059-64. Epub 2006 Nov 17.

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AUTHOR: MacDonald AB. **SOURCE:** *Med Hypotheses*. 2007;68(4):822-5. Epub 2006 Oct 20.

[Antibodies against OspA epitopes of *Borrelia burgdorferi* cross-react with neural tissue](#). **AUTHORS:** Alaeddini A, Latov N. **SOURCE:** *J Neuroimmunol*. 2005 Feb;159(1-2):192-5. Epub 2004 Nov 26.

Anti-neural antibody reactivity in patients with a history of Lyme borreliosis and persistent symptoms. **AUTHORS:** Stricker RB, Johnson L **SOURCE:** *Brain, Behavior, and Immunity* 24 (2010) 1025

Anti-neural antibody reactivity in patients with a history of Lyme borreliosis and persistent symptoms. **AUTHORS:** Volkman D **SOURCE:** *Brain, Behavior, and Immunity* 24 (2010) A Review of Death Certificates Listing Lyme Disease as a Cause of Death in the United States.

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[The association between tick-borne infections, Lyme borreliosis and autism spectrum disorders](#) **AUTHORS:** Bransfield RC, Wulfman JS, Harvey WT, Usman AI. **SOURCE:** *Medical Hypotheses*. 5 Nov 2007

Association of Lyme Disease and Schizoaffective Disorder, Bipolar Type: Is it Inflammation Mediated? **AUTHORS:** Mattingley DW, Koola MM. **SOURCE:** *Indian J Psychol Med*. 2015 Apr-Jun;37(2):243-6.

[Audioologic manifestations of patients with post-treatment Lyme disease syndrome](#) **AUTHORS:** Shotland LI, Mastrioanni MA, Choo DL, Szymko-Bennett YM, Dally LG, Pikus AT, Sledjeski K, Marques A **SOURCE:** *Ear Hear*. 2003 Dec;24(6):508-17

[Autism and Lyme Disease](#) **AUTHORS:** Robert C. Bransfield, MD, Mason Kuhn, MS. **SOURCE:** *JAMA*. 2013;310(8):856 doi:10.1001/jama.2013.194747

A woman in her 50s with manic psychosis. **AUTHORS:** Pasareanu AR, Mygland Å, Kristensen Ø. **SOURCE:** *Tidsskr Nor Laegeforen*. 2012 Mar 6;132(5):537-9

Bartonella henselae bacteremia in a mother and son potentially associated with tick exposure **AUTHORS:** Maggi RG, Ericson M, Mascarelli PE, Bradley JM, Breitschwerdt EB **SOURCE:** *Parasites & Vectors* April 2013, 6:101 doi:10.1186/1756-3305-6-101 <http://dx.doi.org/10.1186/1756-3305-6-101>

Bartonella henselae infection in a family experiencing neurological and neurocognitive abnormalities after woodlouse hunter spider bites **AUTHORS:** Mascarelli PE, Maggi RG, Hopkins S, Mozayeni BR, Trull CL, Bradley JM, Hegarty BC, Breitschwerdt EB **SOURCE:** *Parasites & Vectors* 2013, 6:98 doi:10.1186/1756-3305-6-98 <http://www.parasitesandvectors.com/content/6/1/98/abstract>

Bartonella sp. Bacteremia in Patients with Neurological and Neurocognitive Dysfunction. **AUTHORS:** *Journal of Clinical Microbiology*. 46(9):2856-2861 **SOURCE:** Breitschwerdt EB, Maggi RG, Nicholson WL, Cherry NA, Woods CW.

The basic syndromes of neurological disorders in Lyme borreliosis: **AUTHORS:** Dekonenko EP, Umanskii KG, Virich IE, Kupriianova LV, Rudometov, IuP, Bagrov FI: **SOURCE:** *Ter Arkh* 1995; 67 (11) : 52-53

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Congenital Transmission of Lyme/TBD

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