

# Symptom Checklist: Lyme disease evaluation

Please circle any symptoms that you have experienced with your illness.

## General

Fever  
Night sweats  
Fatigue, lack of endurance  
Unexplained weight gain/loss  
Generalized, unprovoked pain  
Migratory pain

## Head, Face, Neck

Headache, mild or severe  
Facial flushing  
Pressure in head  
Jaw pain or stiffness  
Unexplained hair loss  
Dental problems/pain (unexplained)  
Twitching of facial muscles  
Stiff or painful neck  
Facial paralysis (Bell's Palsy)  
Sore throat, hoarseness  
Tingling of nose, tongue, cheek

## Eyes/Vision and Ears/Hearing

Double or blurry vision  
Difficulty with night vision  
Increased floating spots  
Pain in eyes, or swelling around eyes  
Oversensitivity to light  
Flashing lights/Peripheral waves/phantom images  
Change in color vision  
Decreased hearing in one or both ears  
Buzzing or ringing in one or both ears  
Pain in ears, oversensitivity to sounds  
Auditory hallucinations

## Gastrointestinal and Genito-urinary Systems

Upset stomach (nausea/pain)/ heartburn  
Recurrent vomiting  
Diarrhea/ constipation  
Irritable bladder or interstitial cystitis  
Testicular or pelvic pain  
Decreased libido  
Unexplained menstrual irregularity  
Symptoms worse with menses? Yes No  
Unexplained milk production

## Musculoskeletal System

Bone pain, joint pain or swelling  
Carpal tunnel syndrome  
Stiffness of joints, back, neck  
Frequent tendonitis, tennis elbow  
Muscle pain or cramps, muscle spasms  
Sore soles, especially in am

## Respiratory and Circulatory Systems

Shortness of breath, cough  
Endocarditis, myocarditis, heart failure  
Chest pain or rib soreness  
Peripheral vascular abnormalities  
Rhythm disturbances- extra beats, heart block, palpitations

## Psychological

Mood swings, irritability  
Feeling as if you are losing your mind  
Over-emotional reactions, crying easily  
Depression  
Bi-polar disorder  
Panic attacks, anxiety  
Obsessive-compulsive disorder  
Psychosis

## Mental Capability

Memory loss (short or long term)  
Going to the wrong place  
Disorientation (getting or feeling lost)  
Confusion, difficulty in thinking  
Forgetting how to perform simple tasks  
Difficulty with concentration or reading  
Dementia

## Nervous System

Burning, stabbing, aching or shock sensations  
Lightheadedness, fainting  
Numbness, tingling, pinpricks  
Increased motion sickness  
Peripheral neuropathies  
Abnormalities of vision, hearing, smell, taste or touch  
Muscle weakness,  
Muscle atrophy or partial paralysis  
Muscle twitching  
Speech difficulty (slurred or slow)  
Stammering speech  
Word searching, misspeaking  
Poor balance  
Dizziness  
Difficulty walking, gait problems  
Tremors  
Seizures  
Sleep problems: excessive sleep, insomnia, sleep apnea, narcolepsy, unusual sleep behaviors

Decreased alcohol tolerance? Yes No

## Symptom References

1. Ackermann R, Rehse-Kupper B, Gollmer E, Schmidt R. Chronic neurologic manifestations of erythema migrans borreliosis. *Ann N Y Acad Sci* 1988; 539:16-23.
2. Arav-Boger R, Crawford T, Steere AC, Halsey NA. Cerebellar ataxia as the presenting manifestation of Lyme disease. *Pediatr Infect Dis J* 2002; 21(4):353-6.
3. Bhambhani N, Disla E, Cuppari G. Lyme disease presenting with sequential episodes of ruptured baker cysts. *J Clin Rheumatol* 2006; 12(3):160-162.
4. Bloom BJ, Wyckoff PM, Meissner HC, Steere AC. Neurocognitive abnormalities in children after classic manifestations of Lyme disease. *Pediatr Infect Dis J* 1998; 17(3):189-96.
5. Cassarino DS, Quezado MM, Ghatak NR, Duray PH. Lyme-associated parkinsonism: a neuropathologic case study and review of the literature. *Arch Pathol Lab Med* 2003; 127(9):1204-6.
6. Chancellor MB, McGinnis DE, Shenot PJ, Kiilholma, PHirsch IH. Urinary dysfunction in Lyme disease. *J Urol* 1993; 149(1):26-30.
7. Dinerman H, Steere AC. Lyme disease associated with fibromyalgia. *Ann Intern Med* 1992; 117:281-5.
8. Duray PH, Steere AC. Clinical pathologic correlations of Lyme disease by stage. *Ann N Y Acad Sci* 1988; 539:65-79.
9. Faller J, Thompson F, Hamilton W. Foot and ankle disorders resulting from Lyme disease. *Foot Ankle* 1991; 11(4):236-238.
10. Fallon BA, Kochevar JM, Gaito A, Niels J. The underdiagnosis of neuropsychiatric Lyme disease in children and adults. *Psychiatr Clin of N Am* 1998; 21(3):693-703.
11. Fallon BA, Niels JA. Lyme disease: a neuropsychiatric illness. *Am J Psychiat* 1994; 151(11):1571-83.
12. Fallon BA, Niels JA, Liegner K, DelBene D, Liebowitz MR. The neuropsychiatric manifestations of Lyme borreliosis. *Psychiatr Q* 1992; 63(1):95-117.
13. Gasser R, Horn S, Reisinger E, Fischer L, Pokan R et al. First description of recurrent pericardial effusion associated with borrelia burgdorferi infection. *Int J Cardiol* 1998; 64(3):309-310.
14. Halperin JJ. Neuroborreliosis. *Am J Med* 1995; 98(4A):52S-56S.
15. Halperin JJ, Kaplan GP, Brazinsky S, Tsai TF, Cheng T, Ironside A, Wu P et al. Immunologic reactivity against Borrelia burgdorferi in patients with motor neuron disease. *Arch Neurol* 1990; 47(5):586-94.
16. Halperin JJ, Little BW, Coyle PK, Dattwyler RJ. Lyme disease: cause of a treatable peripheral neuropathy. *Neurology* 1987; 37(11):1700-6.
17. Halperin JJ, Volkman DJ, Luft BJ, Dattwyler RJ. Carpal tunnel syndrome in Lyme borreliosis. *Muscle Nerve* 1989; 12(5):397-400.
18. Haupl T, Hahn G, Rittig M, Krause A, Schoerner C, Schonherr U et al. Persistence of Borrelia burgdorferi in ligamentous tissue from a patient with chronic Lyme borreliosis. *Arthritis Rheum* 1993; 36(11):1621-6.
19. Horowitz HW, Sanghera K, Goldberg N, Pechman D, Kamer R, Duray P, Weinstein A. Dermatomyositis associated with Lyme disease: case report and review of Lyme myositis. *Clin Infect Dis* 1994; 18(2):166-71.
20. Karma A, Seppala I, Mikkila H, Kaakkola S, Viljanen M, Tarkkanen A. Diagnosis and clinical characteristics of ocular Lyme borreliosis. *Am J Ophthalmol* 1995; 119(2):127-35.
21. Kirsch M, Ruben FL, Steere AC, Duray PH, Norden CW, Winkelstein A. Fatal adult respiratory distress syndrome in a patient with Lyme disease. *J Am Med Assoc* 1988; 259(18):2737-9.
22. Krupp LB, Masur D, Schwartz J, Coyle PK, Langenbach LJ, Fernquist SK et al. Cognitive functioning in late Lyme borreliosis. *Arch Neurol* 1991; 48(11):1125-9.
23. Lader E. Lyme disease misdiagnosed as a temporomandibular joint disorder. *J Prosthet Dent* 1990; 63(1):82-5.
24. Lo R, Menzies DJ, Archer H, Cohen TJ. Complete heart block due to Lyme carditis. *J Invasive Cardiol* 2003; 15(6):367-9.
25. Logigian EL, Johnson KA, Kijewski MF, Kaplan RF, Becker JA, Jones KJ et al. Reversible cerebral hypoperfusion in Lyme encephalopathy. *Neurology* 1997; 49(6):1661-1670.
26. Logigian EL, Kaplan RF, Steer AC. Chronic neurologic manifestations of Lyme disease. *N Engl J Med* 1990; 323(21):1438-44.
27. MacDonald AB. Concurrent neocortical borreliosis and Alzheimer's disease: Demonstration of a spirochetal cyst form. *Ann N Y Acad Sci* 1988; 539:468-470.
28. Mikkila HO, Seppala IJ, Viljanen MK, Peltomaa MP, Karma A. The expanding clinical spectrum of ocular Lyme borreliosis. *Ophthalmology* 2000; 107(3):581-7.
29. Mormont E, Esselinckx W, De Ronde T, Hanson P, Deltombe T, Laloux P. Abdominal wall weakness and lumboabdominal pain revealing neuroborreliosis: a report of three cases. *Clin Rheumatol* 2001; 20(6):447-50.
30. Moscatello AL, Worden DL, Nadelman RB, Wormser G, Lucente F. Otolaryngologic aspects of Lyme disease. *Laryngoscope* 1991; 101(6 Pt 1):592-5.
31. Nord JA, Karter D. Lyme disease complicated with pseudotumor cerebri. *Clin Infect Dis* 2003; 37(2):E25-6.
32. Oksi J, Marjamaki M, Nikoskelainen J, Viljanen MK. Borrelia burgdorferi detected by culture and PCR in clinical relapse of disseminated Lyme Borreliosis. *Ann Med* 1999; 31(3):225-32.
33. Oksi J, Voipio-Pulkki L-M, Uksila J, Pulkki K, Laippala P, Viljanen MK. Borrelia burgdorferi infection in patients with suspected acute myocardial infarction. *Lancet* 1997; 350(9089):1447-8.
34. Pachner AR, Steere AC. The triad of neurological manifestations of Lyme disease: meningitis, cranial neuritis, and radiculoneuritis. *Neurology* 1985; 35(1):47-53.
35. Pachner AR, Steiner I. Lyme neuroborreliosis: infection, immunity, and inflammation. *Lancet Neuro* 2007; 6: 544-52.
36. Reik L, Steere AC, Bartenhagen NH, Shope RE, Malawista SE. Neurologic abnormalities of Lyme disease. *Medicine* 1979; 58(4):281-94.
37. Richardson H, Birchall JP, Hill J, McMaster T. Should we routinely screen for Lyme disease in patients with asymmetrical hearing loss? *Br J Audiol* 1994; 28(2):59-61.
38. Riedel M, Straube A, Schwarz MJ, Wilske BM, Muller N. Lyme disease presenting as Tourette's syndrome. *Lancet* 1998; 351(9100):418-419.
39. Rosenhall U, Hanner P, Kaijser B. Borrelia infection and vertigo. *Acta Otolaryngol* 1988; 106(1-2):111-6.
40. Shadick NA, Phillips CB, Logigian EL, Steere AC, Kaplan RF, Berardi VP et al. The long-term clinical outcomes of Lyme disease. *Ann Intern Med* 1994; 121:560-567.
41. Shamim EA, Shamim SA, Liss G, Nylén E, Pincus JH, Yepes M. Constipation heralding neuroborreliosis: an atypical tale of 2 patients. *Arch Neurol* 2005; 62(4):671-3.
42. Sigal L. Clinical manifestations of Lyme disease. *N J Med* 1990; 87(7):549-555.

43. Sigler S, Kershaw P, Scheuch R, Sklarek H, Halperin J. Respiratory failure due to Lyme meningopolyradiculitis. *Am J Med* 1997; 103:544-547.
44. Siwula JM, Mathieu G. Acute onset of facial nerve palsy associated with Lyme disease in a 6 year-old child. *Pediatr Dent* 2002; 24(6):572-4.
45. Smith JL, Winward KE, Nicholson DF, Albert DW. Retinal vasculitis in Lyme borreliosis. *J Clin Neuroophthalmol* 1991; 11(1):7-15.
46. Steere AC. Lyme disease. *N Engl J Med* 1989; 321:586-596.
47. Steere AC, Bartenhagen NH, Craft JE, Hutchinson GJ, Newman JH, Rahn DW. The early clinical manifestations of Lyme disease. *Ann Intern Med* 1983; 99(1):76-82.
48. Steere AC, Malawista SE, Hardin JA, Ruddy S, Arskense W, Andiman WA. Erythema chronicum migrans and Lyme arthritis. The enlarging clinical spectrum. *Ann Intern Med* 1977; 86(6):685-98.
49. Steere AC, Malawista SE et al. The clinical spectrum and treatment of Lyme disease. *Yale J Biol Med* 1984; 57(4):453-64.
50. Tager FA, Fallon BA, Keilp J, Rissenberg M, Jones CR, Liebowitz MR. A Controlled Study of Cognitive Deficits in Children With Chronic Lyme Disease. *J Neuropsychiatry Clin Neurosci* 2001; 13:500-507.
51. Weissenbacher S, Ring J, Hofmann H. Gabapentin for the symptomatic treatment of chronic neuropathic pain in patients with late-stage lyme borreliosis: a pilot study. *Dermatology* 2005; 211(2):123-7.