

325. Sizer IS, Taylor BA, Steere AC. The long-term course of Lyme arthritis in children. *N Engl J Med* 325:159-163, 1991.
326. Smith M, Getinby G, Granstrom M, et al. The European Union Concerted Action World Wide Web site for Lyme borreliosis. *Zentralbl Bakteriol* 287(3):266-269, 1998.
327. Buchwald A. Ein Fall von diffuser idiopathischer Haut-Atrophie. *Arch Dermatol Syph* 10:553-556, 1883.
328. Garin CH, Boujadoux C. Paralyse par les tiques. *J Med Lyon* 71:765, 1922.
329. Bannwarth A. Chronische lymphocytare meningitis entzündliche polyneuritis und "rheumatismus." *Arch Psychiatr Nervenkr* 113:284, 1941.
330. Lennhoff C. Spirochaetes in aetiologically obscure disease. *Acta Dermatol Venereol* 28:295, 1948.
331. Hollstrom E. Penicillin treatment of erythema chronicum migrans Afzeli. *Acta Dermatol Venereol* 38:285, 1958.
332. Binder E, Doepfner R, Hornstein O. Experimental transmission of erythema chronicum migrans from man to man. *Hautarzt* 6:494, 1955.
333. Scrimanti RJ. Erythema chronicum migrans. *Arch Dermatol* 102:104, 1970.
334. Steere AC, Taylor E, Wilson ML, et al. Longitudinal assessment of the clinical and epidemiologic features of Lyme disease in a defined population. *J Infect Dis* 154:295, 1986.
335. Steere AC, Malawista SE. Cases of Lyme disease in the United States: locations correlated with distribution of *Ixodes dammini*. *Ann Intern Med* 91:730, 1979.
336. Lane RS, Piesman J, Burgdorfer W. Lyme borreliosis: relation of its causative agent to its vectors and hosts in North America and Europe. *Annu Rev Entomol* 36:587, 1991.
337. Wallis RC, Brown SE, Kloter KO, Main AJ. Erythema chronicum migrans and Lyme arthritis: field study of ticks. *Am J Epidemiol* 108:322, 1978.
338. Steere AC, Malawista SE, Hardin JA, et al. Erythema chronicum migrans and Lyme arthritis: the enlarging clinical spectrum. *Ann Intern Med* 86:685, 1977.
339. Steere AC, Malawista SE, Newman JH, et al. Antibiotic therapy in Lyme disease. *Ann Intern Med* 93:1, 1980.
340. Hubbard MJ, Baker AS, Cann KJ. Distribution of *Borrelia burgdorferi* s.l. spirochaete DNA in British ticks (Argasidae and Ixodidae) since the 19th century, assessed by PCR. *Med Vet Entomol* 12(1):89-97, 1998.
341. Benach JL, Coleman JL, Skinner RA, Bosler EM. Adult *Ixodes dammini* on rabbits: a hypothesis for the development and transmission of *Borrelia burgdorferi*. *J Infect Dis* 155:1300, 1987.
342. Burgdorfer W, Hayes SF, Corwin D. Pathophysiology of the Lyme disease spirochete, *Borrelia burgdorferi*, in Ixodid ticks. *Rev Infect Dis* 11:S1442, 1989.
343. Naversen DN, Gardner LW. Erythema chronicum migrans in America. *Arch Dermatol* 114:253, 1978.
344. Ai CX, Hu RJ, Hyland KE, et al. Epidemiological and aetiological evidence for transmission of Lyme disease by adult *Ixodes persulcatus* in an endemic area in China. *Int J Epidemiol* 19:1061, 1990.
345. Cooley RA, Kohls GM. The genus *Ixodes* in North America. NIH Bulletin No. 184. Bethesda, Md, National Institutes of Health, 1945, 1-246.
346. Dammin GJ. Lyme disease: its transmission and diagnostic features. *Lab Manage* 24:33, 1986.
347. Fish D. Environmental risk and prevention of Lyme disease. *Am J Med* 98(4A):2S-8S; discussion 8S-9S, 1995.
348. Dennis DT, Nekomoto TS, Victor JC, et al. Reported distribution of *Ixodes scapularis* and *Ixodes pacificus* (Acari: Ixodidae) in the United States. *J Med Entomol* 35:629-638, 1998.
349. Zhang Z. Investigation of Lyme disease in northeast of China. *Chung Hua Liu Hsing Ping Hsueh Tsa Chih* (Chinese J Epidemiol) 10:261, 1989.
350. Zhang Z. Survey on tick vectors of Lyme disease spirochetes in China. *Chung Hua Liu Hsing Ping Hsueh Tsa Chih* (Chinese J Epidemiol) 13:271, 1992.
351. Miyamoto K, Nakao M, Uchikawa K, Fujita H. Prevalence of Lyme borreliosis spirochetes in ixodid ticks of Japan, with special reference to a new potential vector *Ixodes ovatus* (Acari: Ixodidae). *J Med Entomol* 29:216, 1992.
352. Aeschlimann A, Chamot E, Gigon F, et al. *B. burgdorferi* in Switzerland. *Zentralbl Bakteriol Mikrobiol Hyg A* 263:450, 1986.
353. Burgdorfer W, Barbour AG, Hayes SF, et al. Erythema chronicum migrans—a tick-borne spirochetosis. *Acta Trop* 40:79, 1983.
354. Magnarelli LA, Anderson JF, Fish D. Transovarial transmission of *Borrelia burgdorferi* in *Ixodes dammini* (Acari: Ixodidae). *J Infect Dis* 156:234, 1987.
355. Lane RS, Burgdorfer W. Transovarial and transstadial passage of *Borrelia burgdorferi* in the Western black-legged tick, *Ixodes pacificus* (Acari: Ixodidae). *Am J Trop Med Hyg* 37:188, 1987.
356. Sinski E, Karbowiak G, Siuda K, et al. *Borrelia burgdorferi* infection of ticks in some regions of Poland. *Przegl Epidemiol* 48(4):461-465, 1994.
357. Nakao M, Sato Y. Refeeding activity of immature ticks of *Ixodes persulcatus* and transmission of Lyme disease spirochete by partially fed larvae. *J Parasitol* 82(4):669-672, 1996.
358. Heimberger T, Jenkins S, Russell H, Duma R. Epidemiology of Lyme disease in Virginia. *Am J Med Sci* 300:283, 1990.
359. Levine JF, Apperson CS, Spiegel RA, et al. Indigenous cases of Lyme disease diagnosed in North Carolina. *South Med J* 84:27, 1991.
360. Rumpel C, Jones JL. Lyme disease in South Carolina. *J South Carolina Med Assoc* 87:420, 1991.
361. Oliver JH Jr. Lyme borreliosis in the southern United States: a review. *J Parasitol* 82(6):926-935, 1996.
362. Maupin GO, Gage KL, Piesman J, et al. Discovery of an enzootic cycle of *Borrelia burgdorferi* in *Neotoma mexicana* and *Ixodes spinipalpis* from northern Colorado, an area where Lyme disease is nonendemic. *J Infect Dis* 170(3):636-643, 1994.
363. Hall JE, Amrine JW Jr, Gais RD, et al. Parasitization of humans in West Virginia by *Ixodes cookei* (Acari: Ixodidae), a potential vector of Lyme borreliosis. *J Med Entomol* 28:186, 1991.
364. Damrow T, Freedman H, Lane RS, Preston KL. Is *Ixodes (Ixodiopsis) augustus* a vector of Lyme disease in Washington state? *West J Med* 150:580, 1989.
365. Lane RS, Brown RN, Piesman J, Peavey CA. Vector competence of *Ixodes pacificus* and *Dermacentor occidentalis* (Acari: Ixodidae) for various isolates of Lyme disease spirochetes. *J Med Entomol* 31(3):417-424, 1994.
366. Pelletier AR, Finger RF, Sosin DM. The epidemiology of Lyme disease in Kentucky, 1985-1990. *Kentucky Med Assoc J* 89:266, 1991.
367. Campbell GL, Paul WS, Schriefer ME, et al. Epidemiologic and diagnostic studies of patients with suspected early Lyme disease, Missouri, 1990-1993. *J Infect Dis* 172(2):470-480, 1995.

368. Masters E, Granter S, Duray P, Cordes P. Physician-diagnosed erythema migrans and erythema migrans-like rashes following Lone Star tick bites. *Arch Dermatol* 134:955-960, 1998.
369. Reiner KL, Huycke MM, McNabb SJN. The descriptive epidemiology of Lyme disease in Oklahoma. *J Oklahoma State Med Assoc* 84:503, 1991.
370. Bozsi B, Lakos A, Budai J, et al. Occurrence of Lyme borreliosis in Hungary. *Zentralbl Bakteriell Mikrobiol Hyg A* 263:466, 1986.
371. Bigaignon G, Tomasi J-P, Goubau P, et al. A clinical and sero-epidemiological study of 190 Belgian patients suffering from Lyme borreliosis. *Acta Clin Belg* 44:174, 1989.
372. Luger SW. Lyme disease transmitted by a biting fly. *N Engl J Med* 322:1752, 1990.
373. Need JT, Escamilla J. Lyme disease in South America? *J Infect Dis* 163:681, 1991.
374. Hashimoto Y, Kawagishi N, Sakai H, et al. Lyme disease in Japan. Analysis of *Borrelia* species using rRNA gene restriction fragment length polymorphism. *Dermatology* 191(3):193-198, 1995.
375. Russell RC, Doggett SL, Munro R, et al. Lyme disease: a search for a causative agent in ticks in south-eastern Australia. *Epidemiol Infect* 112(2):375-384, 1994.
376. Banerjee SN, Banerjee M, Smith JA, et al. Lyme disease in British Columbia—an update. *British Columbia Med J* 36:540-541, 1994.
377. Ryder JW, Pinger RR, Glancy TG. Inability of *Ixodes cookei* and *Amblyomma americanum* nymphs (Acari: Ixodidae) to transmit *Borrelia burgdorferi*. *J Med Entomol* 29:525, 1992.
378. Brown RN, Lane RS. Lyme disease in California: a novel enzootic transmission cycle of *Borrelia burgdorferi*. *Science* 256:1439, 1992.
379. Schwan TG, Schrupf ME, Karstens RH, et al. Distribution and molecular analysis of Lyme disease spirochetes, *Borrelia burgdorferi*, isolated from ticks throughout California. *J Clin Microbiol* 31(12):3096-3108, 1993.
380. Gern L, Toutoungi LN, Hu CM, et al. *Ixodes (Pholexodes) hexagonus*, an efficient vector of *Borrelia burgdorferi* in the laboratory. *Med Vet Entomol* 5:431-435, 1991.
381. Estrada-Pena A, Oteo JA, Estrada-Pena R, et al. *Borrelia burgdorferi* sensu lato in ticks (Acari: Ixodidae) from two different foci in Spain. *Exp Appl Acarol* 19(3):173-180, 1995.
382. Rawlings JA. Lyme disease in Texas. *Zentralbl Bakteriell Mikrobiol Hyg A* 263:483, 1986.
383. Piesman J, Sinsky RJ. Ability of *Ixodes scapularis*, *Dermacentor variabilis*, and *Amblyomma americanum* (Acari: Ixodidae) to acquire, maintain, and transmit Lyme disease spirochetes (*Borrelia burgdorferi*). *J Med Entomol* 25:336, 1988.
384. Anderson JF, Johnson RC, Magnarelli LA, Hyde FW. Identification of endemic foci of Lyme disease: isolation of *Borrelia burgdorferi* from feral rodents and ticks (*Dermacentor variabilis*). *J Clin Microbiol* 22:36, 1985.
385. Magnarelli LA, Anderson JF. Ticks and biting insects infected with the etiologic agent of Lyme disease, *Borrelia burgdorferi*. *J Clin Microbiol* 26:1482, 1988.
386. Kocan AA, Mukolwe SW, Murphy GL, et al. Isolation of *Borrelia burgdorferi* (Spirochaetales: Spirochaetaceae) from *Ixodes scapularis* and *Dermacentor albipictus* ticks (Acari: Ixodidae) in Oklahoma. *J Med Entomol* 29:630-633, 1992.
387. Angelov L, Dimova P, Berbenkova W. Clinical and laboratory evidence of the importance of the tick *D. marginatus* as a vector of *B. burgdorferi* in some areas of sporadic Lyme disease in Bulgaria. *Eur J Epidemiol* 12(5):499-502, 1996.
388. Feng FP, Zhang W, Zhou G. Discovery and clinical investigation of Lyme disease in Beijing area. *Chung Hua Liu Hsing Ping Hsueh Tsa Chih* 15(1):10-13, 1994.
389. Halouzka J, Postic D, Hubalek Z. Isolation of the spirochaete *Borrelia afzelii* from the mosquito *Aedes vexans* in the Czech Republic. *Med Vet Entomol* 12(1):103-105, 1998.
390. Spielman A, Levine JF, Wilson ML. Vectorial capacity of North American *Ixodes* ticks. *Yale J Biol Med* 57:507, 1984.
391. Nash PT. Does Lyme disease exist in Australia? *Med J Aust* 168(10):479-480, 1998.
392. Russell RC. Lyme disease in Australia—still to be proven. *Emerg Infect Dis* 1(1):29-31, 1995.
393. Yin Z, Braun J, Neure L, et al. T cell cytokine pattern in the joints of patients with Lyme arthritis and its regulation by cytokines and anticytokines. *Arthritis Rheum* 40(1):69-79, 1997.
394. Spielman A. The emergence of Lyme disease and human babesiosis in a changing environment. *Ann N Y Acad Sci* 740:146-156, 1994.
395. Chang YF, Novosel V, Chang CF, et al. Detection of human granulocytic ehrlichiosis agent and *Borrelia burgdorferi* in ticks by polymerase chain reaction. *J Vet Diagn Invest* 10(1):56-59, 1998.
396. Schwartz I, Fish D, Daniels TJ. Prevalence of the rickettsial agent of human granulocytic ehrlichiosis in ticks from a hyperendemic focus of Lyme disease. *N Engl J Med* 337:49-50, 1997.
397. Dumler JS. Is human granulocytic ehrlichiosis a new Lyme disease? Review and comparison of clinical, laboratory, epidemiological, and some biological features. *Clin Infect Dis* 25(Suppl 1):S43-S47, 1997.
398. Walker DH, Dumler JS. Emergence of the ehrlichioses as human health problems. *Emerg Infect Dis* 2:18-29, 1996.
399. Gorenflot A, Moubri K, Precigout E, et al. Human babesiosis. *Ann Trop Med Parasitol* 92(4):489-501, 1998.
400. Dumler JS, Dotevall L, Gustafson R, Granstrom M. A population-based seroepidemiologic study of human granulocytic ehrlichiosis and Lyme borreliosis in the west coast of Sweden. *J Infect Dis* 175:720-722, 1997.
401. Fritz CL, Kjemtrup AM, Conrad PA, et al. Seroepidemiology of emerging tickborne infectious diseases in a northern California community. *J Infect Dis* 175:1432-1439, 1997.
402. Zeman P. Objective assessment of risk maps of tickborne encephalitis and Lyme borreliosis based on spatial patterns of located cases. *Int J Epidemiol* 26(5):1121-1129, 1997.
403. Gilot B, Degeilh B, Pichot J, et al. Prevalence of *Borrelia burgdorferi* (sensu lato) in *Ixodes ricinus* (L.) populations in France, according to a phytoecological zoning of the territory. *Eur J Epidemiol* 12(4):395-401, 1996.
404. Pal E, Barta Z, Nagy F, et al. Neuroborreliosis in county Baranya, Hungary. *Funct Neurol* 13(1):37-46, 1998.
405. Korenberg EI, Kryuchevnikov VN, Kovalevsky YV. Advances in investigations of Lyme borreliosis in the territory of the former USSR. *Eur J Epidemiol* 9(1):86-91, 1993.
406. Pierer K, Kock T, Freidl W, et al. Prevalence of antibodies to *Borrelia burgdorferi* flagellin in Styrian blood donors. *Zentralbl Bakteriell* 279(2):239-243, 1993.
407. Jaenson TG, Fish D, Ginsberg HS, et al. Methods for control of tick vectors of Lyme borreliosis. *Scand J Infect Dis Suppl* 77:151, 1991.

408. Wilson ML, Adler GH, Spielman A. Correlation between abundance of deer and that of the deer tick, *Ixodes dammini* (Acari: Ixodidae). *Ann Entomol Soc Am* 78:172, 1985.
409. Motiejunas L, Bunikis J, Barbour AG, Sadziene A. Lyme borreliosis in Lithuania. *Scand J Infect Dis* 26(2):149-155, 1994.
410. Gustafson R, Jaenson TG, Gardulf A, et al. Prevalence of *Borrelia burgdorferi* sensu lato infection in *Ixodes ricinus* in Sweden. *Scand J Infect Dis* 27(6):597-601, 1995.
411. Levine JF, Wilson ML, Spielman A. Mice as reservoirs of the Lyme disease spirochete. *Am J Trop Med Hyg* 34:355, 1985.
412. Brunet LR, Spielman A, Telford SR 3rd. Short report: density of Lyme disease spirochetes within deer ticks collected from zoonotic sites. *Am J Trop Med Hyg* 53(3):300-302, 1995.
413. Bosler EM, Coleman JL, Benach JL, et al. Natural distribution of the *Ixodes dammini* spirochete. *Science* 220:321, 1983.
414. Rand PW, Lacombe EH, Smith RP, et al. Competence of *Peromyscus maniculatus* (Rodentia: Cricetidae) as a reservoir host for *Borrelia burgdorferi* (Spirochaetales: Spirochaetaceae) in the wild. *J Med Entomol* 30:614-618, 1993.
415. Smith RP Jr, Rand PW, Lacombe EH, et al. Norway rats as reservoir hosts for Lyme disease spirochetes on Monhegan Island, Maine. *J Infect Dis* 168(3):687-691, 1993.
416. Godsey MS, Jr, Amundson TE, Burgess EC, et al. Lyme disease ecology in Wisconsin: distribution and host preferences of *Ixodes dammini*, and prevalence of antibody to *Borrelia burgdorferi* in small mammals. *Am J Trop Med Hyg* 37:180, 1987.
417. Mannelli A, Kitron U, Jones CJ, Slajchert TL. Role of the eastern chipmunk as a host for immature *Ixodes dammini* (Acari: Ixodidae) in northwestern Illinois. *J Med Entomol* 30:87-93, 1993.
418. Centers for Disease Control and Prevention. Recommendations for the Use of Lyme Disease Vaccine: Recommendations of the Advisory Committee on Immunization Practice (ACIP). *MMWR* 48(RR7):1-25, 1999.
419. Burgdorfer W, Keirans JE. Ticks and Lyme disease in the United States. *Ann Intern Med* 99:122, 1983.
420. Burgdorfer W, Lane RS, Barbour AG, et al. The Western black-legged tick, *Ixodes pacificus*: a vector of *Borrelia burgdorferi*. *Am J Trop Med Hyg* 34:925, 1985.
421. Westrom DR, Lane RS, Anderson JR. *Ixodes pacificus* (Acari: Ixodidae): population dynamics and distribution on Columbian black-tailed deer (*Odocoileus hemionus columbianus*). *J Med Entomol* 22:507-511, 1985.
422. Hubalek Z, Halouzka J, Juricova Z. A simple method of transmission risk assessment in enzootic foci of Lyme borreliosis. *Eur J Epidemiol* 12(4):331-333, 1996.
423. Matuschka FR, Endepols S, Richter D, et al. Risk of urban Lyme disease enhanced by the presence of rats. *J Infect Dis* 174(5):1108-1111, 1996.
424. Jaenson TG, Talleklint L. Lyme borreliosis spirochetes in *Ixodes ricinus* (Acari: Ixodidae) and the varying hare on isolated islands in the Baltic Sea. *J Med Entomol* 33(3):339-343, 1996.
425. Hoogstraal H, Kaiser MN, Traylor MA, et al. Ticks (Ixodidae) on birds migrating from Europe and Asia to Africa, 1959-61. *Bull World Health Organ* 28:235-262, 1963.
426. Olsen B, Jaenson TG, Bergstrom S. Prevalence of *Borrelia burgdorferi* sensu lato-infected ticks on migrating birds. *Appl Environ Microbiol* 61(8):3082-3087, 1995.
427. Kurtenbach K, Peacey M, Rijpkema SG, et al. Differential transmission of the genospecies of *Borrelia burgdorferi* sensu lato by game birds and small rodents in England. *Appl Environ Microbiol* 64(4):1169-1174, 1998.
428. Piesman J, Mather TN, Dammin GJ, et al. Seasonal variation of transmission risk of Lyme disease and human babesiosis. *Am J Epidemiol* 126:1187, 1987.
429. Maryland Department of Health and Mental Hygiene, Epidemiology and Disease Control Program. Selected communicable diseases in Maryland in 1995. *Maryland Med J* 45:715-718, 1996.
430. Sood SK, Salzman MB, Johnson BJ, et al. Duration of tick attachment as a predictor of the risk of Lyme disease in an area in which Lyme disease is endemic. *J Infect Dis* 175(4):996-999, 1997.
431. Korenberg EI, Vorobyeva NN, Moskvitina HG, Gorban LY. Prevention of borreliosis in persons bitten by infected ticks. *Infection* 24:187-189, 1996.
432. Strle F, Nelson JA, Ruzic-Sabljic E, et al. European Lyme borreliosis: 231 culture-confirmed cases involving patients with erythema migrans [published erratum appears in *Clinical Infectious Diseases* 1996 November; 23(5):1202]. *Clin Infect Dis* 23(1):61-65, 1996.
433. Zhioua E, Rodhain F, Binet P, Perez-Eid C. Prevalence of antibodies to *Borrelia burgdorferi* in forestry workers of Ile de France, France. *Eur J Epidemiol* 13(8):959-962, 1997.
434. Asbrink E, Olsson I, Hovmark A. Erythema chronicum migrans Afzelius in Sweden. A study of 231 patients. *Zentralbl Bakteriol Mikrobiol Hyg A* 263:229, 1986.
435. Christen HJ, Hanefeld F, Eiffert H, Thomssen R. Epidemiology and clinical manifestations of Lyme borreliosis in childhood. A prospective multicentre study with special regard to neuroborreliosis. *Acta Paediatr Suppl* 386:1-75, 1993.
436. Picken MM, Picken RN, Han D, et al. A two year prospective study to compare culture and polymerase chain reaction amplification for the detection and diagnosis of Lyme borreliosis. *Mol Pathol* 50(4):186-193, 1997.
437. Ai CX, Zhang WF, Zhao JH. Sero-epidemiology of Lyme disease in an endemic area in China. *Microbiol Immunol* 38(7):505-509, 1994.
438. Ai C, Wen Y, Zhang Y, et al. Clinical manifestations and epidemiological characteristics of Lyme disease in Hailin Country, Heilongjiang Province, China. *Ann N Y Acad Sci* 539:302-313, 1988.
439. Hashimoto Y, Takahashi H, Kishiyama K, et al. Lyme disease with facial nerve palsy: rapid diagnosis using a nested polymerase chain reaction-restriction fragment length polymorphism analysis. *Br J Dermatol* 138(2):304-309, 1998.
440. Gerber MA, Shapiro ED, Krause PJ, et al. The risk of acquiring Lyme disease or babesiosis from a blood transfusion. *J Infect Dis* 170(1):231-234, 1994.
441. Falco RC, Fish D. Prevalence of *Ixodes dammini* near the homes of Lyme disease patients in Westchester County, New York. *Am J Epidemiol* 127:826, 1988.
442. Dister SW, Fish D, Bros SM, et al. Landscape characterization of peridomestic risk for Lyme disease using satellite imagery. *Am J Trop Med Hyg* 57(6):687-692, 1997.
443. Kitron U, Kazmierczak JJ. Spatial analysis of the distribution of Lyme disease in Wisconsin. *Am J Epidemiol* 145(6):558-566, 1997.
444. Schutze TL, Bowen GS, Lakat MF, et al. Geographical distribution and density of *Ixodes dammini* (Acari: Ixodidae) and relationship to Lyme disease transmission in New Jersey. *Yale J Biol Med* 57:669, 1984.

445. Lindsay R, Artsob H, Barker I. Distribution of *Ixodes pacificus* and *Ixodes scapularis* re concurrent babesiosis and Lyme disease. *Can Commun Dis Rep* 24(15):121-122, 1998.
446. Banerjee SN, Banerjee M, Fernandeo K, et al. Isolation of *Borrelia burgdorferi*, the Lyme disease spirochete, from rabbit ticks, *Haemaphysalis leporispalustris*—Alberta. *Can Commun Dis Rep* 21(10):86-88, 1995.
447. Rawlings JA, Teltow GJ. Prevalence of *Borrelia* (Spirochaetaceae) spirochetes in Texas ticks. *J Med Entomol* 31:297-301, 1994.
448. Dekonenko EJ, Steere AC, Berardi VP, Kravchuk LN. Lyme borreliosis in the Soviet Union: a cooperative US-USSR report. *J Infect Dis* 158:748, 1988.
449. Zhang Z. Investigation of Lyme disease in Xinjiang. *Chin Med J* 104:244, 1991.
450. Ikushima M, Kawahashi S, Okuyama Y, et al. The survey of prevalence of Lyme borreliosis in forestry workers in Saitama prefecture. *Kansenshogaku Zasshi* 69(2):139-144, 1995.
451. Shih CM, Wang JC, Chao LL, Wu TN. Lyme disease in Taiwan: first human patient with characteristic erythema chronicum migrans skin lesion. *J Clin Microbiol* 36(3):807-808, 1998.
452. Yoshinari NH, de Barros PJ, Bonoldi VL, et al. Outline of Lyme borreliosis in Brazil. *Rev Hosp Clin Fac Med Sao Paulo* 52(2):111-117, 1997.
453. Stanchi NO, Balague LJ. Lyme disease: antibodies against *Borrelia burgdorferi* in farm workers in Argentina. *Rev Saude Publica* 27(4):305-307, 1993.
454. Abarca K, Ribera M, Prado P, et al. Neuroborreliosis in Chile. Report of a child probably infected by imported pets. *Rev Med Chil* 124(8):975-979, 1996.
455. Aoun K, Kechrid A, Lagha N, et al. Lyme disease in Tunisia, results of a clinical and serological study (1992-1996). *Sante* 8(2):98-100, 1998.
456. Strijdom SC, Berk M. Lyme disease in South Africa. *S Afr Med J* 86(6 Suppl):741-744, 1996.
457. Marjolet M, Gueglio B, Traore M. Does Lyme disease (or an analogous disease) exist in Mali, West Africa? *Trans R Soc Trop Med Hyg* 89(4):387, 1995.
458. Mason PR, Kelly PJ, Nilsson I, Wadstrom T. Apparent absence of Lyme borreliosis in Zimbabwe. *Trans R Soc Trop Med Hyg* 88(4):412, 1994.
459. Centers for Disease Control and Prevention. Lyme disease—United States, 1994. *MMWR* 44(24):459-462, 1995.
460. Schmid GP, Horsley R, Steere AC, et al. Surveillance of Lyme disease in the United States, 1982. *J Infect Dis* 151:1144, 1985.
461. Centers for Disease Control and Prevention. Lyme Disease Cases Reported to CDC by State Health Departments, 1982-1997. <http://www.cdc.gov/epo/mmwrhtml/00056949.htm>
462. Lastavica CC, Wilson ML, Berardi VP, et al. Rapid emergence of a focal epidemic of Lyme disease in coastal Massachusetts. *N Engl J Med* 320:133, 1989.
463. Petersen LR, Sweeney AH, Checko PJ, et al. Epidemiological and clinical features of 1,149 persons with Lyme disease identified by laboratory-based surveillance in Connecticut. *Yale J Biol Med* 62:253, 1989.
464. Benach JL, Coleman JL. Clinical and geographic characteristics of Lyme disease in New York. *Zentralbl Bakteriologie Mikrobiol Hyg A* 263:477, 1986.
465. White DJ, Chang H-G, Benach JL, et al. The geographic spread and temporal increase of the Lyme disease epidemic. *JAMA* 266:1230, 1991.
466. Williams CL, Curran AS, Lee AC, Sousa VO. Lyme disease: Epidemiologic characteristics of an outbreak in Westchester County, N Y *Am J Public Health* 76:62, 1986.
467. Bowen GS, Griffin M, Hayne C, et al. Clinical manifestations and descriptive epidemiology of Lyme disease in New Jersey, 1978 to 1982. *JAMA* 251:2236, 1984.
468. Goldoft MJ, Schulze TL, Parkin WE, Gunn RA. Lyme disease in New Jersey. *N J Med* 87:579, 1990.
469. Mitchell CS, Cloeren M, Israel E, et al. Lyme disease in Maryland: 1987-1990. *Maryland Med J* 41:391, 1992.
470. Schwartz BS, Hofmeister E, Glass GE, et al. Lyme borreliosis in an inner-city park in Baltimore. *Am J Public Health* 81:803, 1991.
471. Agger W, Case KL, Bryant GL, Callister SM. Lyme disease: clinical features, classification, and epidemiology in the upper Midwest. *Medicine* 70:83, 1991.
472. Dryer RF, Goellner PG, Carney AS. Lyme arthritis in Wisconsin. *JAMA* 241:498, 1979.
473. Huycke MM, D'Alessio DD, Marx JJ. Prevalence of antibody to *Borrelia burgdorferi* by indirect fluorescent antibody assay, ELISA, and Western immunoblot in healthy adults in Wisconsin and Arizona. *J Infect Dis* 165:1133, 1992.
474. McBryde RR. Lyme disease in Alabama. *Ala Med* 59:24, 1990.
475. Dryer RF, Buckwalter JA, Carney AS, Weinstein SL. Lyme arthritis in the Midwest: a diagnostic challenge. *J Iowa Med Soc* 71:249, 1981.
476. Stobierski MG, Bidol SA, Hall WN. Lyme disease in Michigan: an update. *Mich Med* 91:41, 1992.
477. Barbour AG. Does Lyme disease occur in the South?: a survey of emerging tick-borne infections in the region. *Am J Med Sci* 311(1):34-40, 1996.
478. Tugwell P, Dennis DT, Weinstein A, et al. Laboratory evaluation in the diagnosis of Lyme disease. *Ann Intern Med* 127(12):1109-1123, 1997.
479. Laboratory Centre for Disease Control. Lyme Disease by Province/Territory 1987-1997, personal communication.
480. Bakken JS, Krueth J, Wildon-Nordskog C, et al. Clinical and laboratory characteristics of human granulocytic ehrlichiosis. *JAMA* 275:199-205, 1996.
481. Krause PJ, Telford SR 3rd, Spielman A, et al. Concurrent Lyme disease and babesiosis. Evidence for increased severity and duration of illness. *JAMA* 275(21):1657-1660, 1996.
482. dos Santos C, Kain K. Concurrent babesiosis and Lyme disease diagnosed in Ontario. *Can Commun Dis Rep* 24(12):97-101, 1998.
483. Sweeney CJ, Ghassemi M, Agger WA, Persing DH. Coinfection with *Babesia microti* and *Borrelia burgdorferi* in a western Wisconsin resident. *Mayo Clin Proc* 73(4):338-341, 1998.
484. Nadelman RB, Horowitz HW, Hsieh TC, et al. Simultaneous human granulocytic ehrlichiosis and Lyme borreliosis. *N Engl J Med* 337(1):27-30, 1997.
485. Benach JL, Coleman JL, Habicht GS. Serologic evidence for simultaneous occurrences of Lyme disease and babesiosis. *J Infect Dis* 144:473-477, 1981.
486. Mitchell PD, Reed KD, Hofkes JM. Immunoserologic evidence of coinfection with *Borrelia burgdorferi*, *Babesia microti*, and human granulocytic *Ehrlichia* species in residents of Wisconsin and Minnesota. *J Clin Microbiol* 34(3):724-727, 1996.
487. Magnarelli LA, Dumler JS, Anderson JF, et al. Coexistence of antibodies to tick-borne pathogens of babesiosis, ehrlichiosis, and Lyme borreliosis in human sera. *J Clin Microbiol* 33:3054-3057, 1995.
488. Wong SJ, Brady GS, Dumler JS. Serological responses

- to *Ehrlichia equi*, *Ehrlichia chaffeensis*, and *Borrelia burgdorferi* in patients from New York State. *J Clin Microbiol* 35(9):2198-2205, 1997.
489. Anderson JF, Johnson RC, Magnarelli LA, et al. *Peromyscus leucopus* and *Microtus pennsylvanicus* simultaneously infected with *Borrelia burgdorferi* and *Babesia microti*. *J Clin Microbiol* 23:135-137, 1986.
 490. Stafford KC III, Cartter ML, Magnarelli LA, et al. Temporal correlations between tick abundance and prevalence of ticks infected with *Borrelia burgdorferi* and increasing incidence of Lyme disease. *J Clin Microbiol* 36(5):1240-1244, 1998.
 491. Mather TN, Nicholson MC, Donnelly EF, Matyas BT. Entomologic index for human risk of Lyme disease. *Am J Epidemiol* 144(11):1066-1069, 1996.
 492. Daniels TJ, Falco RC, Schwartz I, et al. Deer ticks (*Ixodes scapularis*) and the agents of Lyme disease and human granulocytic ehrlichiosis in a New York City park. *Emerg Infect Dis* 3(3):353-355, 1997.
 493. Feder HM Jr, Gerber MA, Cartter ML, et al. Prospective assessment of Lyme disease in school-aged population in Connecticut. *J Infect Dis* 171(5):1371-1374, 1995.
 494. Falco RC, Daniels TJ, Fish D. Increase in abundance of immature *Ixodes scapularis* (Acari: Ixodidae) in an emergent Lyme disease endemic area. *J Med Entomol* 32(4):522-526, 1995.
 495. Schwartz BS, Goldstein MD, Childs JE. Longitudinal study of *Borrelia burgdorferi* infection in New Jersey outdoor workers, 1988-1991. *Am J Epidemiol* 139(5):504-512, 1994.
 496. Orloski KA, Campbell GL, Genese CA, et al. Emergence of Lyme disease in Hunterdon County, New Jersey, 1993: a case-control study of risk factors and evaluation of reporting patterns. *Am J Epidemiol* 147(4):391-397, 1998.
 497. Varde S, Beckley J, Schwartz I. Prevalence of tick-borne pathogens in *Ixodes scapularis* in a rural New Jersey county. *Emerg Infect Dis* 4(1):97-99, 1998.
 498. Ravyn MD, Goodman JL, Kodner CB, et al. Immunodiagnosis of human granulocytic ehrlichiosis by using culture-derived human isolates. *J Clin Microbiol* 36(6):1480-1488, 1998.
 499. Cromley EK, Cartter ML, Mrozinski RD, Ertel SH. Residential setting as a risk factor for Lyme disease in a hyperendemic region. *Am J Epidemiol* 147(5):472-477, 1998.
 500. Jones CG, Ostfeld RS, Richard MP, et al. Chain reactions linking acorns to gypsy moth outbreaks and Lyme disease risk. *Science* 279(5353):1023-1026, 1998.
 501. World Health Organization unpublished document. Report on an International Meeting, "EURO Workshop on Lyme Borreliosis," held in Baden (Vienna), Austria, 4 June 1987 (EUR/ICP/CDS 011 1989).
 502. Stanek G, O'Connell S, Cimmino M, et al. European Union Concerted Action on Risk Assessment in Lyme Borreliosis: clinical case definitions for Lyme borreliosis. *Wien Klin Wochenschr* 108(23):741-747, 1996.
 503. Strle F, Stantic-Pavlinic M. Lyme disease in Europe. *N Engl J Med* 334:803, 1996.
 504. Flisiak R, Zabicka J. Epidemiologic situation of Lyme borreliosis in Europe. *Przegl Epidemiol* 49(4):375-379, 1995.
 505. Neira O, Cerda C, Alvarado MA, et al. Lyme disease in Chile. Prevalence study in selected groups. *Rev Med Chil* 124(5):537-544, 1996.
 506. Costa IP, Yoshinari NH, Barros PJ, et al. Lyme disease in Mato Grosso do Sul State, Brazil: report of three clinical cases. Including the first of Lyme meningitis in Brazil. *Rev Hosp Clin Fac Med Sao Paulo* 51(6):253-257, 1996.
 507. Ellert-Zygadlowska J, Radowska D, Orłowski M, et al. Borreliosis—Lyme disease—a growing clinical problem. *Przegl Lek* 53(8):587-591, 1996.
 508. Pancewicz SA, Januszkiewicz A, Hermanowska-Szpakowicz T. Detection of antibodies of *Borrelia burgdorferi* among inhabitants of north-eastern Poland. *Przegl Epidemiol* 50(4):375-381, 1996.
 509. Gustafson R, Svenungsson B, Gardulf A, et al. Prevalence of tick-borne encephalitis and Lyme borreliosis in a defined Swedish population. *Scand J Infect Dis* 22:297, 1990.
 510. Berglund J, Eitrem R, Norrby SR. Long-term study of Lyme borreliosis in a highly endemic area in Sweden. *Scand J Infect Dis* 28(5):473-478, 1996.
 511. Berglund J, Eitrem R, Ornstein K, et al. An epidemiologic study of Lyme disease in southern Sweden. *N Engl J Med* 333(20):1319-1327, 1995.
 512. Angelov L, Aeshliman A, Korenberg E, et al. Data on the epidemiology of Lyme disease in Bulgaria. *Med Parazitol (Mosk)* 4:13, 1990.
 513. Christova I, Hohenberger S, Zehetmeier C, Wilske B. First characterization of *Borrelia burgdorferi* sensu lato from ticks and skin biopsy in Bulgaria. *Med Microbiol Immunol* 186(4):171-175, 1998.
 514. Blaauw I, Nohlmans L, van den Bogaard T, van der Linden S. Diagnostic tools in Lyme borreliosis: clinical history compared with serology. *J Clin Epidemiol* 45:1229, 1992.
 515. De Mik EL, Van Pelt W, Docters-van Lecuwen BD, et al. The geographical distribution of tick bites and erythema migrans in general practice in The Netherlands. *Int J Epidemiol* 26(2):451-457, 1997.
 516. Wahlberg P, Granlund H, Nyman D, et al. Late Lyme borreliosis: epidemiology, diagnosis and clinical features. *Ann Med* 25(4):349-352, 1993.
 517. Oksi J, Viljanen MK. Tick bites, clinical symptoms of Lyme borreliosis, and *Borrelia* antibody responses in Finnish army recruits training in an endemic region during summer. *Mil Med* 160(9):453-456, 1995.
 518. Ishizaki H, Pyykko I, Nozue M. Neuroborreliosis in the etiology of vestibular neuronitis. *Acta Oto-Laryngol Suppl* 503:67-69, 1993.
 519. Basta J, Janovska D, Daniel M. Educational status of the Czech population about Lyme borreliosis and experience with tick bites—pilot study. *Epidemiol Mikrobiol Imunol* 47(2):52-55, 1998.
 520. Rohacova H, Hancil J, Hulinska D, et al. Ceftriaxone in the treatment of Lyme neuroborreliosis. *Infection* 24(1):88-90, 1996.
 521. Fahrer H, van der Linden SM, Sauvain MJ, et al. The prevalence and incidence of clinical and asymptomatic Lyme borreliosis in a population at risk. *J Infect Dis* 163:305, 1991.
 522. Fahrer H, Sauvain MJ, Zhioua E, et al. Longterm survey (7 years) in a population at risk for Lyme borreliosis: what happens to the seropositive individuals? *Eur J Epidemiol* 14(2):117-123, 1998.
 523. Nadal D, Wunderli W, Briner H, Hansen K. Prevalence of antibodies to *Borrelia burgdorferi* in forest workers and blood donors from the same region in Switzerland. *Eur J Clin Microbiol Infect Dis* 8:992-995, 1989.
 524. Neubert U, Munchhoff P, Volker B, et al. *Borrelia burgdorferi* infections in Bavarian forest workers. *Ann N Y Acad Sci* 539:476, 1988.
 525. Schmidt R, Kabatzki J, Hartung S, Ackermann R. Erythema chronicum migrans disease in the Federal Republic

- lic of Germany. Zentralbl Bakteriol Mikrobiol Hyg A 263:435, 1986.
526. Stücht-Groh V, Martin R, Schmidt-Wolf I. Antibody titer determination against *Borrelia burgdorferi* in blood donors and in two different groups of patients. Ann N Y Acad Sci 539:497, 1988.
 527. Rath PM, Ibershoff B, Mohnhaupt A, et al. Seroprevalence of Lyme borreliosis in forestry workers from Brandenburg, Germany. Eur J Clin Microbiol Infect Dis 15(5):372-377, 1996.
 528. Maiwald M, Petney TN, Bruckner M, et al. Natural epidemiology of Lyme borreliosis with reference to clustered incidence of illnesses in the suburbs of a North Baden community. Gesundheitswesen 57(7):419-425, 1995.
 529. Hauser U, Krahl H, Peters H, et al. Impact of strain heterogeneity on Lyme disease serology in Europe: comparison of enzyme-linked immunosorbent assays using different species of *Borrelia burgdorferi* sensu lato. J Clin Microbiol 36(2):427-436, 1998.
 530. Christen HJ, Hanefeld F. Lyme borreliosis in childhood and pregnancy. In Weber K, Burgdorfer W (eds). Aspects of Lyme borreliosis. Berlin, Springer-Verlag, 1993, pp 228-239.
 531. Bussen S, Steck T. Manifestation of Lyme arthritis in the puerperal period. Z Geburtshilfe Perinatol 198(4):150-152, 1994.
 532. Cimmino MA, Fumarola D, Sambri V, Accardo S. The epidemiology of Lyme borreliosis in Italy. Microbiologica 15:419, 1992.
 533. Nuti M, Amaddeo D, Crovatto M, et al. Infections in an Alpine environment: antibodies to hantaviruses, leptospira, rickettsiae, and *Borrelia burgdorferi* in defined Italian populations. Am J Trop Med Hyg 48(1):20-25, 1993.
 534. Petrovic M, Vogelaers D, Van Renterghem L, et al. Lyme borreliosis—a review of the late stages and treatment of four cases. Acta Clin Belg 53(3):178-183, 1998.
 535. Dmitrovic R, Djordjevic D, Djerkovic V, et al. Epidemiology of Lyme borreliosis. Glas Srp Akad Nauka [Med] (43):11-21, 1993.
 536. Isailovic G, Veljkovic M, Soc N, et al. Erythema migrans after a tick bite in a pregnant woman. Glas Srp Akad Nauka [Med] (43):173-175, 1993.
 537. Jovanovic R, Hajric A, Cirkovic A, et al. Lyme disease and pregnancy. Glas Srp Akad Nauka [Med] (43):169-172, 1993.
 538. Hamlet N, Nathwani D, Ho-Yen DO, Walker E. *Borrelia burgdorferi* infections in U.K. workers at risk of tick bites. Lancet 1:789, 1989.
 539. Ho-Yen D, Bennet AJ, Chisholm S, Deacon AG. Lyme disease in the highlands. Scot Med J 35:168, 1990.
 540. Muhlemann MF, Wright DJM. Emerging pattern of Lyme disease in the United Kingdom and Irish Republic. Lancet (Jan. 31):260, 1987.
 541. Guy EC, Bateman DE, Martyn CN, et al. Lyme disease: prevalence and clinical importance of *Borrelia burgdorferi* specific IgG in forest workers. Lancet 1:484, 1989.
 542. Morgan-Capner P, Cutler SJ, Wright DJM. *Borrelia burgdorferi* infection in U.K. workers at risk of tick bites. Lancet 1:789, 1989.
 543. Rees DH, Axford JS. Evidence for Lyme disease in urban park workers: a potential new health hazard for city inhabitants. Br J Rheumatol 33(2):123-128, 1994.
 544. Mawby TV, Lovett AA. The public health risks of Lyme disease in Breckland, U.K.: an investigation of environmental and social factors. Soc Sci Med 46(6):719-727, 1998.
 545. O'Connell S. Lyme disease in the United Kingdom. BMJ 310(6975):303-308, 1995.
 546. Ananjeva LP, Skripnikowva IA, Barskova VG, Steere AC. Clinical serologic features of Lyme borreliosis in Russia. J Rheumatol 22(4):689-694, 1995.
 547. Jenum PA, Mehl R, Hasseltvedt V, Bjark P. Lyme borreliosis. Tidsskr Nor Laegeforen 114(17):1968-1973, 1994.
 548. Cryan B, Cutler S, Wright DJM. Lyme disease in Ireland. Irish Med J 85:65, 1992.
 549. Oteo JA, Martinez de Artola V, Casas J, et al. Epidemiology and prevalence of seropositivity against *Borrelia burgdorferi* antigen in La Rioja, Spain. Rev Epidemiol Sante Publique 40:85, 1992.
 550. Guerrero A, Escudero R, Marti-Belda P, Quereda C. Frequency of the clinical manifestations of Lyme borreliosis in Spain. Enferm Infecc Microbiol Clin 14(2):72-79, 1996.
 551. Saz JV, Merino FJ, Beltran M. Current status of Lyme disease in Spain: clinical and epidemiological aspects. Rev Clin Esp 195(1):44-49, 1995.
 552. Chatzipanagiotou S, Papatreou-Rakitzis P, Malamou-Ladas H, Antoniou P. Determination of antibody titres for *Borrelia burgdorferi* in the serum of gypsies living in Attika, Greece. Eur J Clin Microbiol Infect Dis 11:477, 1992.
 553. Santino I, Dastoli F, Lavorino C, et al. Determination of antibodies to *Borrelia burgdorferi* in the serum of patients living in Calabria, southern Italy. Panminerva Med 38(30):167-172, 1996.
 554. Zhang Z. Geographic distribution of Lyme disease in Madanjiang. Chung Hua Liu Hsing Ping Hsueh Tsa Chih (Chinese J Epidemiol) 12:154, 1991.
 555. Park KH, Chang WH, Schwan TG. Identification and characterization of Lyme disease spirochetes, *Borrelia burgdorferi* sensu lato, isolated in Korea. J Clin Microbiol 31:1831, 1993.
 556. Maradiaga-Cecena MA, Llausa-Vargas A, Baguera-Heredia J, et al. Eritema crónico migratorio asociado a artritis. Enfermedad de Lyme o una variante. Rev Mex Reumatol 6:61, 1991.
 557. Guzman L, Neira O. Lyme disease in Chile. J Rheumatol 20:774, 1993.
 558. Azulay RD, Azulay-Abulafia L, Tavares-Sodre C, et al. Lyme disease in Rio de Janeiro, Brazil. Int J Dermatol 30:569, 1991.
 559. Vasquez L, Couto C, Mato OL. Lyme disease: first case in Argentina. Prensa Med Argent 79:584, 1992.
 560. Winward KE, Smith JL. Ocular disease in Caribbean patients with serologic evidence of Lyme borreliosis. J Clin Neuro-Ophthalmol 9:65, 1989.
 561. Patil RK, Kashyap S, Bansal SK, Sood A. Lyme disease in a Shimla boy. J Assoc Physicians India 38:503, 1990.
 562. Stanek G, Hirschl A, Stemberger H, et al. Does Lyme borreliosis also occur in tropical and subtropical areas? Zentralbl Bakteriol Mikrobiol Hyg A 263:491, 1986.
 563. Nozais JP, Assous M, Cordier F, Gentilini M. A probable case of Lyme disease contracted in Mozambique. Bull Soc Pathol Exot 86(5):345-346, 1993.
 564. Collares-Pereira M, Gomes AC, Prasad M, et al. Preliminary survey of leptospirosis and Lyme disease amongst febrile patients attending community hospital ambulatory care in Maputo, Mozambique. Cent Afr J Med 43(8):234-238, 1997.
 565. Mhalu FS, Matre R. Serological evidence of Lyme borreliosis in Africa: results from studies in Dar es Salaam, Tanzania. East Afr Med J 73(9):583-585, 1996.
 566. Abraham Z, Feuerman EJ, Rozenbaum M, Gluck Z.

- Lyme disease in Israel. *J Am Acad Dermatol* 25:729, 1991.
567. Berger SA, Samish M, Klette RY, et al. Lyme disease acquired in Israel: report of a case and studies of serological cross reactivity in relapsing fever. *Isr J Med Sci* 29(8):464-465, 1993.
 568. Hammouda NA, Hegazy IH, el-Sawy EH. ELISA screening for Lyme disease in children with chronic arthritis. *J Egypt Soc Parasitol* 25(2):525-533, 1995.
 569. McColl GJ, Frauman AG, Dowling JP, Varigos GA. A report of Lyme disease in Victoria. *Aust N Z J Med* 24(3):324-325, 1994.
 570. Santino I, Dastoli F, Sessa R, Del Piano M. Geographical incidence of infection with *Borrelia burgdorferi* in Europe. *Panminerva Med* 39(3):208-214, 1997.
 571. Nidzovic Z, Stajkovic N, Bodirosa T. Use of repellents for protection against vectors of Lyme borreliosis. *Glas Srp Akad Nauka [Med]* (43):107-113, 1993.
 572. Ackermann R, Horstrup P, Schmidt R. Tick-borne meningopolyneuritis (Garin-Bujadoux-Bannwarth). *Yale J Biol Med* 57:485, 1984.
 573. Nakama H, Muramatsu K, Uchikama K, Yamagishi T. Possibility of Lyme disease as an occupational disease—seroepidemiological study of regional residents and forestry workers. *Asia Pac J Public Health* 7(4):214-217, 1994.
 574. DiCaudo DJ, Su WP, Marshall WF, et al. Acrodermatitis chronica atrophicans in the United States: clinical and histopathologic features of six cases. *Cutis* 54(2):81-84, 1994.
 575. Rees DH, O'Connell S, Brown MM, et al. The value of serological testing for Lyme disease in the UK. *Br J Rheumatol* 34(2):132-136, 1995.
 576. Gregory RP, Green AD, Merry RT. Lyme disease in military personnel. *J R Army Med Corps* 139(1):11-13, 1993.
 577. Shadick NA, Daltroy LH, Phillips CB, et al. Determinants of tick-avoidance behaviors in an endemic area for Lyme. *Am J Prev Med* 13(4):265-270, 1997.
 578. Bosler EM, Ormiston BG, Coleman JL, et al. Prevalence of the Lyme disease spirochete in populations of white-tailed deer and white-footed mice. *Yale J Biol Med* 57:651, 1984.
 579. Wegner Z, Racewicz M, Kubica-Biernat B, et al. The prevalence of *Ixodes ricinus* ticks (Acari, Ixodidae) in the forested areas of Gdansk, Sopot, and Gdynia and their infection rate with *Borrelia burgdorferi* spirochetes. *Przegl Epidemiol* 51(1-2):11-20, 1997.
 580. Donahue JG, Piesman J, Spielman A. Reservoir competence of white-footed mice for Lyme disease spirochetes. *Am J Trop Med Hyg* 36:92, 1987.
 581. Matuschka FR, Eiffert H, Ohlenbusch A, Spielman A. Amplifying role of edible dormice in Lyme disease transmission in central Europe. *J Infect Dis* 170(1):122-127, 1994.
 582. Gill JS, McLean RG, Shriner RB, Johnson RC. Serologic surveillance for the Lyme disease spirochete, *Borrelia burgdorferi*, in Minnesota by using white-tailed deer as sentinel animals. *J Clin Microbiol* 32(2):444-451, 1994.
 583. Ji B, Collins MT. Seroepidemiologic survey of *Borrelia burgdorferi* exposure of dairy cattle in Wisconsin. *Am J Vet Res* 55(9):1228-1231, 1994.
 584. Levy SA, Lissman BA, Ficke CM. Performance of *Borrelia burgdorferi* bacterin in borreliosis-endemic areas. *JAM Vet Med Assoc* 202:1834-1838, 1993.
 585. Coburn J, Magoun L, Bodary SC, Leong JM. Integrins $\alpha_3\beta_3$ and $\alpha_3\beta_1$ mediate attachment of Lyme disease spirochetes to human cells. *Infect Immun* 66(5):1946-1952, 1998.
 586. Leong JM, Wang H, Magoun L, et al. Different classes of proteoglycans contribute to the attachment of *Borrelia burgdorferi* to cultured endothelial and brain cells. *Infect Immun* 66(3):994-999, 1998.
 587. Gross DM, Steere AC, Huber BT. T helper 1 response is dominant and localized to the synovial fluid in patients with Lyme arthritis. *J Immunol* 160(2):1022-1028, 1998.
 588. Halperin J, Heyes MP. Neuroactive kynurenines in Lyme borreliosis. *Neurology* 42:43-50, 1992.
 589. Roessner K, Trivedi H, Gaur L, et al. Biased T-cell antigen receptor repertoire in Lyme arthritis. *Infect Immun* 66(3):1092-1099, 1998.
 590. Duray PH, Steere AC. Clinical pathologic correlations of Lyme disease by stage. *Ann N Y Acad Sci* 539:65, 1988.
 591. Wormser GP, Nowakowski J, Nadelman RB, et al. Improving the yield of blood cultures for patients with early Lyme disease. *J Clin Microbiol* 36(1):296-298, 1998.
 592. Duray PH. Clinical pathologic correlations of Lyme disease. *Rev Infect Dis* 11(Suppl 6):S1487, 1989.
 593. Persing DH, Rutledge BJ, Rys PN, et al. Target imbalance: disparity of *Borrelia burgdorferi* genetic material in synovial fluid from Lyme arthritis patients. *J Infect Dis* 169(3):668-672, 1994.
 594. Hulshof MM, Vandembroucke JP, Nohlmans LM, et al. Long-term prognosis in patients treated for erythema chronicum migrans and acrodermatitis chronica atrophicans. *Arch Dermatol* 133(1):33-37, 1997.
 595. Goldberg NS, Forseter G, Nadelman RB, et al. Vesicular EM. *Arch Dermatol* 128:1495, 1992.
 596. Berger BW. Dermatologic manifestations of Lyme disease. *Rev Infect Dis* 11(Suppl 6):S1475, 1989.
 597. De Koning J. Histopathologic patterns of erythema migrans and borrelial lymphocytoma. *Clin Dermatol* 11(3):377-383, 1993.
 598. Kramer N, Rickert RR, Brodtkin RH, Rosenstein ED. Septal panniculitis as a manifestation of Lyme disease. *Am J Med* 81:149, 1986.
 599. Asbrink E. Cutaneous manifestations of Lyme borreliosis: clinical definitions and differential diagnosis. *Scand J Infect Dis Suppl* 77:44, 1991.
 600. Asbrink E, Brehmer-Andersson E, Hovmark A. Acrodermatitis chronica atrophicans—a spirochetosis. *Am J Dermatopathol* 8:209, 1986.
 601. Buechner SA, Ruffli T, Erb P. Acrodermatitis chronica atrophicans: a chronic T-cell-mediated immune reaction against *Borrelia burgdorferi*? Clinical, histologic, and immunohistochemical study of five cases. *J Am Acad Dermatol* 28(3):399-405, 1993.
 602. De Koning J, Tazelaar DJ, Hoogkamp-Korstanje JA, Elema JD. Acrodermatitis chronica atrophicans: a light and electron microscopic study. *J Cutan Pathol* 22(1):23-32, 1995.
 603. Granter SR, Barnhill RL, Hewins ME, Duray PH. Identification of *Borrelia burgdorferi* in diffuse fasciitis with peripheral eosinophilia: borrelial fasciitis. *JAMA* 272(16):1283-1285, 1994.
 604. Rank EL, Dias SM, Hasson J, et al. Human necrotizing splenitis caused by *Borrelia burgdorferi*. *Am J Clin Pathol* 91:493, 1989.
 605. Goellner MH, Agger WA, Burgess JH, Duray PH. Hepatitis due to recurrent Lyme disease. *Ann Intern Med* 108:707, 1988.
 606. Ramakrishnan T, Gloster E, Bonagura VR, et al. Eosinophilic lymphadenitis in Lyme disease. *Pediatr Infect Dis J* 8:180, 1989.
 607. Stanek G, Klein J, Bittner R, Glogar D. *Borrelia burgdorferi*

- eri as an etiologic agent in chronic heart failure? *Scand J Infect Dis Suppl* 77:85, 1991.
608. Heller J, Holzer G, Schimrigk K. Immunological differentiation between neuroborreliosis and multiple sclerosis. *J Neurol* 237:465, 1990.
 609. Meurers B, Kohlhepp W, Gold R, et al. Histopathological findings in the central and peripheral nervous systems in neuroborreliosis. *J Neurol (Springer-Verlag)* 237:113, 1990.
 610. Murray R, Morawetz R, Kepes J, et al. Lyme neuroborreliosis manifesting as an intracranial mass lesion. *Neurosurgery* 30:769, 1992.
 611. Maimone D, Villanova M, Stanta G, et al. Detection of *Borrelia burgdorferi* DNA and complement membrane attack complex deposits in the sural nerve of a patient with chronic polyneuropathy and tertiary Lyme disease. *Muscle Nerve* 20(8):969-975, 1997.
 612. Kristoferitsch W, Sluga E, Graf M, et al. Neuropathy associated with acrodermatitis chronica atrophicans. *Ann N Y Acad Sci* 539:35, 1988.
 613. Waniek C, Prohovnik I, Kaufman MA, Dwork AJ. Rapidly progressive frontal-type dementia associated with Lyme disease. *J Neuropsychiatry Clin Neurosci* 7(3):345-347, 1995.
 614. Muller-Felber W, Reimers DC, de Koning J, et al. Myositis in Lyme borreliosis: an immunohistochemical study of seven patients. *J Neurol Sci* 118(2):207-212, 1993.
 615. Callister SM, Schell RF, Lim LC, et al. Detection of borreliacidal antibodies by flow cytometry. An accurate, highly specific serodiagnostic test for Lyme disease. *Arch Intern Med* 154(14):1625-1632, 1994.
 616. Ilowite NT. Muscle, reticuloendothelial, and late skin manifestations of Lyme disease. *Am J Med* 98(4A):63S-68S, 1995.
 617. Hoffmann JC, Stichtenoth DO, Zeidler H, et al. Lyme disease in a 74-year-old forest owner with symptoms of dermatomyositis. *Arthritis Rheum* 38(8):1157-1160, 1995.
 618. Johnston YE, Duray PH, Steere AC, et al. Lyme arthritis: spirochetes found in synovial microangiopathic lesions. *Am J Pathol* 118:26, 1985.
 619. Steere AC, Green J, Schoen RT, et al. Successful parenteral penicillin therapy of established Lyme arthritis. *N Engl J Med* 312:869, 1985.
 620. Nanagara R, Duray PH, Schumacher HR Jr. Ultrastructural demonstration of spirochetal antigens in synovial fluid and synovial membrane in chronic Lyme disease: possible factors contributing to persistence of organisms. *Hum Pathol* 27(10):1025-1034, 1996.
 621. Gardner T. Lyme disease. In *Infectious Diseases of the Fetus and Newborn Infant*. Remington J, Klein JO (eds). Philadelphia, WB Saunders, 1995, pp 489-493.
 622. Mikkelsen AL, Palle C. Case report: Lyme disease during pregnancy. *Acta Obstet Gynecol Scand* 66:477, 1987.
 623. Figueroa R, Bracero LA, Agüero-Rosenfeld M, et al. Confirmation of *Borrelia burgdorferi* spirochetes by polymerase chain reaction in placentas of women with reactive serology for Lyme antibodies. *Gynecol Obstet Invest* 41(4):240-243, 1996.
 624. Hashkes PJ, Lovell DJ. Recognition of infantile-onset multisystem inflammatory disease as a unique entity. *J Pediatr* 130(4):513-515, 1997.
 625. Yarom A, Rennebohm RM, Levinson JE. Infantile multisystem inflammatory disease: a specific syndrome? *J Pediatr* 106:390, 1985.
 626. Prieur HM, Griscelli C. Arthropathy with rash, chronic meningitis, eye lesions, and mental retardation. *J Pediatr* 99:79, 1981.
 627. Steenbarger JR. Congenital tick-borne relapsing fever: report of a case with first documentation of transplacental transmission. *March of Dimes Birth Defects Foundation, Birth Defects: Original Article Series* 18:39, 1982.
 628. Yagupsky P, Shimon M. Neonatal *Borrelia* species infection (relapsing fever). *Am J Dis Child* 139:74, 1985.
 629. Shaked Y, Shpilberg O, Samra D, Samra Y. Leptospirosis in pregnancy and its effect on the fetus: case report and review. *Clin Infect Dis* 17(2):241-243, 1993.
 630. New DL, Quinn JB, Qureshi MZ, Sigler SJ. Vertically transmitted babesiosis [letter; comment]. *J Pediatr* 131(1 Pt 1):163-164, 1997.
 631. Horowitz HW, Kilchevsky E, Haber S, et al. Perinatal transmission of the agent of human granulocytic ehrlichiosis. *N Engl J Med* 339(6):375-378, 1998. (Reply to letter. *N Engl J Med* 339(26):1942-1943, 1998.)
 632. Buitrago MI, Ijdo JW, Rinaudo P, et al. Human granulocytic ehrlichiosis during pregnancy treated successfully with rifampin. *Clin Infect Dis* 27(1):213-215, 1998.
 633. Centers for Disease Control and Prevention. Lyme disease—diagnostic criteria. *MMWR* 46(RR):20-21, 1997.
 634. Asbrink E, Hovmark A. Comments on the course and classification of Lyme borreliosis. *Scand J Infect Dis Suppl* 77:41, 1991.
 635. Rahn DW, Felz MW. Lyme disease update. Current approach to early, disseminated, and late disease. *Postgrad Med* 103(5):51-54, 57-59, 63-64 passim, 1998.
 636. Feder HM Jr, Gerber MA, Krause PJ, et al. Early Lyme disease: a flu like illness without erythema migrans. *Pediatrics* 91(2):456-459, 1993.
 637. Steere AC, Schoen RT, Taylor E. The clinical evolution of Lyme arthritis. *Ann Intern Med* 107:725, 1987.
 638. Williams CL, Strobino B, Lee A, et al. Lyme disease in childhood: clinical and epidemiologic features of ninety cases. *Pediatr Infect Dis J* 9:10, 1990.
 639. Nadelman RB, Wormser GP. Erythema migrans and early Lyme disease. *Am J Med* 98(4A):15S-23S; discussion 23S-24S, 1995.
 640. Nadelman RB, Nowakowski J, Forseter G, et al. The clinical spectrum of early Lyme borreliosis in patients with culture-confirmed erythema migrans. *Am J Med* 100(5):502-508, 1996.
 641. Herzer P. Joint manifestations of Lyme borreliosis in Europe. *Scand J Infect Dis Suppl* 77:55, 1991.
 642. Berger BW. Current aspects of Lyme disease and other *Borrelia burgdorferi* infections. *Dermatol Clin* 15(2):247-255, 1997.
 643. Gerber MA, Shapiro ED, Burke GS, et al. Lyme disease in children in southeastern Connecticut. *Pediatric Lyme Disease Study Group*. *N Engl J Med* 335(17):1270-1274, 1996.
 644. Strle F, Pleterski-Rigler D, Stanek G, et al. Solitary borrelial lymphocytoma: report of 36 cases. *Infection* 20:201, 1992.
 645. Pohl-Koppe A, Wilske B, Weiss M, Schmidt H. *Borrelia* lymphocytoma in childhood. *Pediatr Infect Dis J* 17(5):423-426, 1998.
 646. Strle F, Maraspin V, Pleterski-Rigler D, et al. Treatment of borrelial lymphocytoma. *Infection* 24(1):80-84, 1996.
 647. Kutting B, Bonsmann G, Metzke D, et al. *Borrelia burgdorferi*-associated primary cutaneous B cell lymphoma: complete clearing of skin lesions after antibiotic pulse therapy or intralesional injection of interferon alfa-2a. *J Am Acad Dermatol* 36(2 Pt 2):311-314, 1997.
 648. Gerber MA, Zemel LS, Shapiro ED. Lyme arthritis in children: clinical epidemiology and long-term outcomes. *Pediatrics* 102(4 Pt 1):905-908, 1998.

649. Huppertz HI, Karch H, Suschke HJ, et al. Lyme arthritis in European children and adolescents. The Pediatric Rheumatology Collaborative Group. *Arthritis Rheum* 38(3):361-368, 1995.
650. Huppertz HI, Bentas W, Haubitz I, et al. Diagnosis of paediatric Lyme arthritis using a clinical score. *Eur J Pediatr* 157(4):304-308, 1998.
651. Steere AC. Clinical definitions and differential diagnosis of Lyme arthritis. *Scand J Infect Dis Suppl* 77:51, 1991.
652. Steere AC. Diagnosis and treatment of Lyme arthritis. *Med Clin North Am* 81(1):179-194, 1997.
653. Miller A, Stanton RP, Eppes SC. Acute arthritis of the hip in a child infected with the Lyme spirochete. *Clin Orthop Rel Res* (286):212-214, 1993.
654. Albisetti M, Schaer G, Good M, et al. Diagnostic value of cerebrospinal fluid examination in children with peripheral facial palsy and suspected Lyme borreliosis. *Neurology* 49(3):817-824, 1997.
655. Logigian EL, Kaplan RF, Steere AC. Chronic neurologic manifestations of Lyme disease. *N Engl J Med* 323:1438, 1990.
656. Halperin JJ. North American Lyme neuroborreliosis. *Scand J Infect Dis Suppl* 77:74, 1991.
657. Halperin JJ, Logigian EL, Finkel MF, Pearl RA. Practice parameters for the diagnosis of patients with nervous system Lyme borreliosis (Lyme disease). Quality Standards Subcommittee of the American Academy of Neurology. *Neurology* 46(3):619-627, 1996.
658. Pachner AR. Early disseminated Lyme disease: Lyme meningitis. *Am J Med* 98(4A):30S-37S; discussion 37S-43S, 1995.
659. Clark JR, Carlson RD, Sasaki CT, et al. Facial paralysis in Lyme disease. *Laryngoscope* 95:1341, 1985.
660. Cook SP, Macartney KK, Rose CD, et al. Lyme disease and seventh nerve paralysis in children. *Am J Otolaryngol* 18(5):320-323, 1997.
661. Belman AL, Reynolds L, Preston T, et al. Cerebrospinal fluid findings in children with Lyme disease-associated facial nerve palsy. *Arch Pediatr Adolesc Med* 151(12):1224-1228, 1997.
662. Logigian EL, Steere AC. Clinical and electrophysiologic findings in chronic neuropathy of Lyme disease. *Neurology* 42:303, 1992.
663. Fallon BA, Nields JA, Burrascano JJ, et al. The neuropsychiatric manifestations of Lyme borreliosis. *Psychiatr Q* 63:95, 1992.
664. Pfister HW, Preac-Mursic V, Wilske B, et al. Catatonic syndrome in acute severe encephalitis due to *Borrelia burgdorferi* infection. *Neurology* 43(2):433-435, 1993.
665. Kaplan RF, Jones-Woodward L. Lyme encephalopathy: a neuropsychological perspective. *Semin Neurol* 17(1):31-37, 1997.
666. Fallon BA, Das S, Plutchok JJ, et al. Functional brain imaging and neuropsychological testing in Lyme disease. *Clin Infect Dis* 25(Suppl 1):S57-S63, 1997.
667. Logigian EL, Johnson KA, Kijewski MF, et al. Reversible cerebral hypoperfusion in Lyme encephalopathy. *Neurology* 49(6):1661-1670, 1997.
668. Salonen R, Rinne JO, Halonen P, et al. Lyme borreliosis associated with complete flaccid paraplegia. *J Infect* 28(2):181-184, 1994.
669. Olivares JP, Pallas F, Ceccaldi M, et al. Lyme disease presenting as isolated acute urinary retention caused by transverse myelitis: an electrophysiological and urodynamical study. *Arch Phys Med Rehabil* 76(12):1171-1172, 1995.
670. Kindstrand E, Nilsson BY, Hovmark A, et al. Peripheral neuropathy in acrodermatitis chronica atrophicans—late *Borrelia* manifestation. *Acta Neurol Scand* 95(6):338-345, 1997.
671. Curless RG, Schatz NJ, Bowen BC, et al. Lyme neuroborreliosis masquerading as a brainstem tumor in a 15-year-old. *Pediatr Neurol* 15(3):258-260, 1996.
672. Oksi J, Kalimo H, Martila RJ, et al. Intracranial aneurysms in three patients with disseminated Lyme borreliosis: cause or chance association? *J Neurol Neurosurg Psychiatr* 64(5):636-642, 1998.
673. Feder HM, Jr, Zalneraitis EL, Reik L, Jr. Lyme disease: acute focal meningoencephalitis in a child. *Pediatrics* 82:931, 1988.
674. Reik L Jr. Stroke due to Lyme disease. *Neurology* 43(12):2705-2707, 1993.
675. Broderick JP, Sandok BA, Mertz LE. Focal encephalitis in a young woman 6 years after the onset of Lyme disease: tertiary Lyme disease? *Mayo Clin Proc* 62:313, 1987.
676. Chehrena M, Zagardo MT, Koski CL. Subarachnoid hemorrhage in a patient with Lyme disease. *Neurology* 48(2):520-523, 1997.
677. Hemmer B, Glockner FX, Kaiser R, et al. Generalized motor neuron disease as an unusual manifestation of *Borrelia burgdorferi* infection. *J Neurol Neurosurg Psychiatr* 63:257-258, 1997.
678. Chancellor MB, McGinnis DE, Shenot PJ, et al. Urinary dysfunction in Lyme disease. *J Urol* 149(1):26-30, 1993.
679. Sigler S, Kershaw P, Scheuch R, et al. Respiratory failure due to Lyme meningoradiculitis. *Am J Med* 103(6):544-547, 1997.
680. Demaerel P, Crevits I, Casteels-Van Daele M, Baert AL. Meningoradiculitis due to borreliosis presenting as low back pain only. *Neuroradiology* 40(2):126-127, 1998.
681. Benke T, Gasse T, Hittmair-Delazer M, Schmutzhard E. Lyme encephalopathy: long-term neuropsychological deficits years after acute neuroborreliosis. *Acta Neurol Scand* 91(5):353-357, 1995.
682. Ravdin LD, Hilton E, Primeau M, et al. Memory functioning in Lyme borreliosis. *J Clin Psychiatr* 57(7):282-286, 1996.
683. Shadick NA, Phillips CB, Logigian EL, et al. The long-term clinical outcomes of Lyme disease. A population-based retrospective cohort study. *Ann Intern Med* 121(8):560-567, 1994.
684. Bloom BJ, Wyckoff PM, Meissner HC, Steere AC. Neurocognitive abnormalities in children after classic manifestations of Lyme disease. *Pediatr Infect Dis J* 17(3):189-196, 1998.
685. Fernandez RE, Rothberg M, Ferencz G, Wujack D. Lyme disease of the CNS: MR imaging findings in 14 cases. *AJNR* 11:479, 1990.
686. Rubin DA, Sorbera C, Nikitin P, et al. Prospective evaluation of heart block complicating early Lyme disease. *Pacing Clin Electrophysiol* 15:252, 1992.
687. Steere AC, Batsford WP, Weinberg M, et al. Lyme carditis: cardiac abnormalities of Lyme disease. *Ann Intern Med* 93:8, 1980.
688. Sigal LH. Early disseminated Lyme disease: cardiac manifestations. *Am J Med* 98(4A):25S-28S; discussion 28S-29S, 1995.
689. van der Linde MR. Lyme carditis: clinical characteristics of 105 cases. *Scand J Infect Dis Suppl* 77:81, 1991.
690. Robinson TT, Herman L, Birrer RB, et al. Lyme carditis: a rare presentation in an unexpected setting. *Am J Emerg Med* 16(3):265-269, 1998.
691. Bruyn GA, De Koning J, Reijsoo FJ, et al. Lyme pericarditis leading to tamponade. *Br J Rheumatol* 33(9):862-866, 1994.

692. Gasser R, Fruhwald F, Schumacher M, et al. Reversal of *Borrelia burgdorferi* associated dilated cardiomyopathy by antibiotic treatment? *Cardiovasc Drugs Ther* 10(3):351-360, 1996.
693. Anish SA. Case report: possible Lyme endocarditis. *N J Med* 90(8):599-601, 1993.
694. Sangha O, Phillips CB, Fleischmann KE, et al. Lack of cardiac manifestations among patients with previously treated Lyme disease. *Ann Intern Med* 128(5):346-353, 1998.
695. Gellis SE, Stadecker MJ, Steere AC. Spirochetes in atrophic skin lesions accompanied by minimal host response in a child with Lyme disease. *J Am Acad Dermatol* 25:395, 1991.
696. Patnas MA. Lyme disease: the evolution of erythema chronicum migrans into acrodermatitis chronica strophicans. *Cutis* 52(3):169-170, 1993.
697. Gerster JC, et al. Rheumatic manifestations related to acrodermatitis chronica strophicans. A review of four cases. *Rev Rhum Engl Ed* 65(10):567-570, 1998.
698. Edwards KS, Kanengiser S, Li KI, et al. Lyme disease presenting as hepatitis and jaundice in a child. *Pediatr Infect Dis J* 9:592, 1990.
699. Oksi J, Mertsola J, Reunanen M, et al. Subacute multiple-site osteomyelitis caused by *Borrelia burgdorferi*. *Clin Infect Dis* 19(5):891-896, 1994.
700. Horowitz HW, Dworkin B, Forseter G, et al. Liver function in early Lyme disease. *Hepatology* 23(6):1412-1417, 1996.
701. Lesser RL. Ocular manifestations of Lyme disease. *Am J Med* 98(4A):60S-62S, 1995.
702. Bergloff J, Gasser R, Feigl B. Ophthalmic manifestations in Lyme borreliosis. A review. *J Neuro-Ophthalmol* 14(1):15-20, 1994.
703. Seidenberg KB, Leib ML. Orbital myositis with Lyme disease. *Am J Ophthalmol* 109:13-16, 1990.
704. Strominger MB, Slamovits TL, Herskovitz S, Lipton RB. Transient worsening of optic neuropathy as a sequela of the Jarisch-Herxheimer reaction in the treatment of Lyme disease. *J Neuro-Ophthalmol* 14(2):77-80, 1994.
705. Koch F, Augustin AJ, Boker T. Neuroborreliosis with retinal pigment epithelium detachments. *Ger J Ophthalmol* 5(1):12-15, 1996.
706. Pizzarello LD, MacDonald AB, Semlear R, et al. Temporal arteritis associated with *Borrelia* infection: a case report. *J Clin Neuroophthalmol* 9:3-6, 1989.
707. Moscatello AL, Worden DL, Nadelman RB, et al. Otolaryngologic aspects of Lyme disease. *Laryngoscope* 101:592, 1991.
708. Scasso CA, Bruschini L, Berrettini S, Bruschini P. Progressive sensorineural hearing loss from infectious agents. *Acta Otorhinolaryngol Ital* 18(4 Suppl 59):51-54, 1998.
709. Quinn SJ, Boucher BJ, Booth JB. Reversible sensorineural hearing loss in Lyme disease. *J Laryngol Otol* 111(6):562-564, 1997.
710. Heir GM, Fein LA. Lyme disease awareness for the New Jersey dentist. A survey of orofacial and headache complaints associated with Lyme disease. *J N J Dent Assoc* 69(1):19, 21, 62-63 passim, 1998.
711. Gunthard HF, Peter O, Gubler J. Leukopenia and thrombocytopenia in a patient with early Lyme borreliosis. *Clin Infect Dis* 22(6):1119-1120, 1996.
712. Cantero-Hinojosa J, Diez-Ruiz A, Santos-Perez JL, et al. Lyme disease associated with hemophagocytic syndrome. *Clin Invest* 71(8):620, 1993.
713. Gaudino EA, Coyle PK, Krupp LB. Post-Lyme syndrome and chronic fatigue syndrome. Neuropsychiatric similarities and differences. *Arch Neurol* 54(11):1372-1376, 1997.
714. Bujak DI, Weinstein A, Dornbush RL. Clinical and neurocognitive features of the post Lyme syndrome. *J Rheumatol* 23(8):1392-1397, 1996.
715. Dinerman H, Steere AC. Lyme disease associated with fibromyalgia. *Ann Intern Med* 117:281, 1992.
716. Salazar JC, Gerber MA, Goff CW. Long-term outcome of Lyme disease in children given early treatment. *J Pediatr* 122(4):591-593, 1993.
717. Nowakowski J, Schwartz I, Nadelman RB, et al. Culture-confirmed infection and reinfection with *Borrelia burgdorferi*. *Ann Intern Med* 127(2):130-132, 1997.
718. Golde WT, Robinson-Dunn B, Stobierski MG, et al. Culture-confirmed reinfection of a person with different strains of *Borrelia burgdorferi* sensu stricto. *J Clin Microbiol* 36(4):1015-1019, 1998.
719. Berger BW. Treatment of erythema chronicum migrans of Lyme disease. *Ann N Y Acad Sci* 539:346, 1988.
720. Berger BW. Treating erythema chronicum migrans of Lyme disease. *J Am Acad Dermatol* 15:459, 1986.
721. Luger SW. Active Lyme borreliosis in pregnancy: outcomes of six cases with stage 1, stage 2, and stage 3 disease. Fourth International Conference on Lyme Borreliosis, Stockholm, Books A and B abstracts, 1990.
722. Schutzer SE, Janniger CK, Schwartz RA. Lyme disease in pregnancy. *Cutis* 47:267, 1991.
723. Stiernstedt G. Lyme borreliosis during pregnancy. *Scand J Infect Dis Suppl* 71:99, 1990.
724. Elsukova LV, Korenberg EI, Kozin GA. Pathology of pregnancy and the fetus in Lyme disease. *Med Parazitol (Mosk)* (4):59-62, 1994.
725. Neubert U. Clinical aspects of *Borrelia burgdorferi* infections. *Z Hautkr* 64(8):649-652, 655-656, 1989.
726. Lakos A. Lyme borreliosis and pregnancy [abstract no. P11]. In Symposium on the therapy and prophylaxis for Lyme borreliosis. Portoroz, Slovenia, Austrian Society for Hygiene and Slovenian Society for Infectious Diseases, 1995, p 43.
727. Gerber MA, Zalneraitis EL. Childhood neurologic disorders and Lyme disease during pregnancy. *Pediatr Neurol* 11(1):41-43, 1994.
728. Strobino B, et al. Maternal Lyme disease and congenital heart disease: A case-control study in an endemic area. *Am J Obstet Gynecol* 180(3 Pt 1):711-716, 1999.
729. Sigal LH. Lyme disease: testing and treatment. Who should be tested and treated for Lyme disease and how? *Rheum Dis Clin North Am* 19(1):79-93, 1993.
730. Nocton JJ, Steere AC. Lyme disease. *Adv Intern Med* 40:69-117, 1995.
731. Sicuranza G, Baker DA. Lyme disease in pregnancy. In Coyle PK (ed). *Lyme Disease*. St. Louis, Mosby-Year Book, 1993, pp 184-186.
732. Silver RM, Yang L, Daynes RA, et al. Fetal outcome in murine Lyme disease. *Infect Immun* 63(1):66-72, 1995.
733. Shapiro ED. Lyme disease. *Pediatr Rev* 19(5):147-154, 1998.
734. Eckman MH, Steere AC, Kalish RA, Pauker SG. Cost effectiveness of oral as compared with intravenous antibiotic therapy for patients with early Lyme disease or Lyme arthritis. *N Engl J Med* 337(5):357-363, 1997.
735. Nichol KG, Dennis DT, Steere AC, et al. Test-treatment strategies for patients suspected of having Lyme disease: a cost-effectiveness analysis. *Ann Intern Med* 128(1):37-48, 1998.
736. Lightfoot RW Jr, Luft BJ, Rahn DW, et al. Empiric parenteral antibiotic treatment of patients with fibromyalgia and fatigue and a positive serologic result for Lyme