Important: False negative test results have been widely reported in both early and late disease.

Many Lyme patients were firstly diagnosed with other illnesses such as Juvenile Arthritis, Rheumatoid Arthritis, Reactive Arthritis, Psoriatic Arthritis, Infectious Arthritis, Osteoarthritis, Fibromyalgia, Raynaud's Syndrome, Chronic Fatigue Syndrome, Interstitial Cystis, Gastroesophageal Reflux Disease, Fifth's Disease, Multiple Sclerosis, scleroderma, lupus, early ALS, early Alzheimers Disease, crohn's disease, menières syndrome, reynaud's syndrome, sjogren's syndrome, irritable bowel syndrome, colitis, prostatitis, psychiatric disorders (bipolar, depression, etc.), encephalitis, sleep disorders, thyroid disease and various other illnesses.

Timing of Blood Tests for Lyme Disease

Time and again this office receives phone calls from patients who have a rash, and in some cases had had a tick attached at the site, only to be told by their physician to come back a month later for a test. It is imperative that clinicians understand that the presence of a “bull’s eye” rash caused by a tick-bite is indicative of infection, and treatment should be started immediately. Do not look at this as simply an allergic reaction to the bite. Err on the side of caution. Most blood tests do not work until 4-6 weeks after infection has occurred, and any delay may cause complications at a later date.

Remember also to advise the patient of the likelihood of a Jarisch-Herxheimer (Herx) reaction upon initiation of treatment. This is common in spirochetal disease treatment and is caused as a result of toxins released as the die off of the spirochetes takes place.

The bull's-eye rash (erythema migrans) may occur in some cases (30%+) but is often missed or unrecognized and does not rule out Lyme Disease in its absence. It is not always a bull's eye and can be more generalized in appearance.

The incubation period from infection to onset of erythema migrans is typically 7 to 14 days but may be as short as 3 days and as long as years.

As reported by RICHARD SADOVSKY, M.D., American Academy of Family Physicians, "The diagnosis of Lyme disease is clinical. Early infection is often accompanied by false-negative serologic tests, although this can occur late in the disease. The positive predictive value of serologic testing is low in patients with vague and other nonspecific symptoms such
Lyme disease spirochetes disseminate from the site of the tick bite by cutaneous, lymphatic and blood borne routes. The signs of early 'disseminated' infection can occur within days to weeks. Symptoms may also slowly reveal themselves over a long period of time with patients showing up at their doctors with vague, varied symptoms and no knowledge of a tick bite nor rash.

In addition to possible multiple (secondary) erythema migrans lesions, early disseminated infection may be manifest as disease of the nervous system in varying degrees (ie. muscle twitches, tics, numbness/tingling, lower back/neck pain), the musculoskeletal system, or the heart. Early neurologic manifestations include aseptic meningitis (infection in the cerebrospinal fluid also called lymphocytic meningitis), cranial neuropathy (changes in nerve sensation of the skull, face/jaw region, especially facial full/partial nerve palsy), and radiculoneuritis (nerve root involvement). Musculoskeletal manifestations may include migratory joint and muscle pains with or without objective signs of joint swelling.

Cardiac manifestations may include rapid/fluctuating heart rate (tachycardia), slowing of the heart rate below 60 bpm (bradycardia), myocarditis (inflammation of the muscular walls of the heart) and transient atrioventricular blocks [the inappropriate delay (or complete inability) of an electrical impulse, generated in the atria, to reach the ventricles (via the atrioventricular node)].

B. burgdorferi (Lyme) infection in the untreated or inadequately treated patient may progress to late disseminated disease weeks to years after infection. Manifestations of late disseminated Lyme disease are intermittent swelling and/or pain of one or a few joints (asymetrically), chronic axonal polyneuropathy, or encephalopathy, the latter usually manifested by cognitive disorders, eye disturbances, sleep disturbance, fatigue, memory and personality changes (including depression, bi-polar disorder and psychiatric manifestations). More frequently, Lyme disease morbidity may be severe, chronic, and disabling. An ill-defined post-Lyme disease syndrome is said to occur in some persons following treatment for Lyme disease. But this is clearly an 'active' not 'post' lyme infection and further treatment must continue if resolution is to be gained.

Fatalities are recorded ranging from heart problems to suicide.

Ref.
2. Coinfections

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