

Lyme Disease: Western, Eastern and the Future Medicine

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Lyme disease is known to be contracted during the summer months between June and September. According to the CDC Lyme Disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans by the bite of infected blacklegged ticks.

Lyme disease is the most commonly reported vectorborne illness in the U.S. and in 2009, it was the 5th most common Nationally Notifiable disease. In 2010, 94% of Lyme disease cases were reported from 12 states: Connecticut, Delaware, Maine, Maryland, Massachusetts, Minnesota, New Jersey, New Hampshire, New York, Pennsylvania, Virginia, & Wisconsin.

Typical symptoms : include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks; laboratory testing is helpful in the later stages of disease. Lyme disease can effect different parts of the body, and those infected may not experience all of the possible symptoms. Many of these symptoms can occur with other diseases as well. The first sign of infection is usually a circular rash called [erythema migrans](#) or EM. This rash occurs in approximately 70-80% of infected persons and begins at the site of a tick bite after a delay of 3-30 day. 60% of the patients develop neurologic symptoms. Most report headaches and about 15% develop meningitis and encephalitis.

In Western Medicine Lyme Disease diagnosis and treatment is based on mainly the following criteria:

- 1) A history of possible exposure to infected blacklegged ticks.
- 2) Laboratory blood tests, which are helpful if used correctly when symptoms present.

Like blood tests for many other infectious diseases, the test for Lyme disease measures antibodies made by white blood cells in response to infection. It can take several weeks after infection for the body to produce sufficient antibodies to be detected. Therefore, patients tested during the first few weeks of illness will often test negative. In contrast, patients who have had Lyme disease for longer than 4-6 weeks, especially those with later stages of illness involving the brain or the joints, will

almost always test positive. A patient who has been ill for months or years and has a negative test almost certainly does not have Lyme disease as the cause of their symptoms.

Treatment in the West is through the use of antibiotics. Patients treated with appropriate antibiotics in the early stages of Lyme disease usually recover rapidly and completely. According to the CDC, approximately 10-20% of patients (particularly those who were diagnosed later), following appropriate antibiotic treatment, may have persistent or recurrent symptoms and are considered to have Post-treatment Lyme Disease Syndrome (PTLDS). This may be a case in which this type of patient would then seek Eastern Medicine for treatment of this disease. Most often our patients are coming to seek treatment for Lyme symptoms that they have had for many years.

Eastern Medicine treats the patterns of symptoms or syndrome of Lyme disease. The TCM practitioner would take into account the syndrome expressed by the patient and then make a differential diagnosis. This diagnosis is made also taking into account tongue and pulse analysis. Lyme disease is a known Western Medical condition, but not known to previously exist in China. Chinese Medicine treats patterns not individual symptoms which may better account for the range of symptoms often experienced by individuals. Pattern diagnosis/treatment is a crucial part of using Chinese Medicine for prevention of the manifestation of disease, instead of focusing on solely symptomatic treatments as is somewhat more common in western medicine.

There are no Traditional Chinese Medicine differential pattern diagnoses listed for this pattern. Thus, a TCM herbalist would want to know when these symptoms began. Was the patient already treated by western medical drugs? If so the herbal treatment may involve a sort of detoxification of these drugs from the patient's system. Questions would be asked such as does this patient sweat or do they not sweat at all? Then along with a pulse and tongue diagnosis and the patient's report of the syndrome they experience, the involved organ systems would be determined. Are they dizzy, how is their hydration? headaches? Joint pain and or swelling? Often in the case of the treatment of Lyme disease the Spleen would be treated as a system notably involved in this pathology.

How can we understand all of this in our modern world where science needs to prove as the basis for our decision making regarding healthcare treatment? The Tam Healing System accounts for and incorporates the scientific understanding into the treatment strategy. We use the basis of Western Anatomy and Physiology to explain how the body needs stimulation and improvement of the immune

system function to heal from Lyme disease. We find that the nerve pathways in our body can be effected to stimulate and improve organ function. This stimulation can come in many forms. Commonly we use Acupuncture, massage, Tong Ren therapy and now brainwave therapy. Any form of stimulation that is used in an appropriate manner and in the correct locations can bring a therapeutic result.

The important areas to stimulate for the treatment of Lyme disease are found beside the vertebral processes at C1, C2, C3, T1, T2, T3, & T7. Cervical vertebra 1 sends a message to the top of the head. Cervical vertebra 2 sends a nerve impulse to the forehead. These are common areas where people feel discomfort when they are struggling with Lyme disease. Cervical vertebra 3 innervates the eye, sinus, and ear. Five organs make up the immune system: thymus gland, skin, bone marrow, spleen, and lymph. Each of these organs is innervated by a nerve originating from the spinal cord. Mostly these organs are innervated along the thoracic vertebrae.

Thoracic vertebra 1 innervates our Bone Marrow production center in the body. Bone marrow is the tissue in the center of our large bones. This is the place where new blood cells are produced. 2 types of stem cells are produced: hemopoietic (which can produce blood cells) and stromal (which can produce fat, cartilage and bone). There are two types of bone marrow: red marrow (also known as myeloid tissue) and yellow marrow. Red blood cells, platelets and most white blood cells arise in red marrow; some white blood cells develop in yellow marrow.

Thoracic vertebra 2 travels to the Thymus Gland. The main function is to produce and process lymphocytes or T-cells (where "T" stands for thymus derived). Lymphocytes are white blood cells (WBCs), which are also known as leukocytes. After the white blood cells mature, they leave the gland and get settled in the spleen and the lymph nodes, where a fresh batch of T-cells is produced. These white blood cells are the body's immunity system and protect the body by producing antibodies that stop the invasion of foreign agents, bacteria and viruses. Another function is to prevent the abnormal growth of cells, that may lead to cancer. The T lymphocytes travel from the bone marrow to the thymus where they remain till they get activated. After maturity, the lymphocytes enter the blood stream from where they travel to other lymphatic organs and provide defense mechanism against diseases. The thymus gland also produces a hormone called thymosin, which stimulates the T-cells in the other lymphatic organs to mature.

Thoracic vertebra 3 innervates the lymphatic system, which consists of a complex network of ducts or tubes and nodes that transport a clear, watery fluid called lymph throughout the body. Lymph is a fluid which contains lymphocytes, a type of white blood cells and antibodies. The lymph fluid, that is circulated throughout the body, consists of antibodies and lymphocytes, which act as barrier for different types of micro organisms and other foreign bodies. When these bodies come in contact with the human body, production of lymphocytes is triggered immediately. Thus, disease causing micro organisms are destructed then and there itself.

Thoracic vertebra 7 innervates the Spleen along the left side while on the right it goes to the abdominal blood vessel. The spleen is the largest lymphoid tissue in the body. It is a purple colored organ and is situated at the left upper side of the abdomen. It supplies the body with fresh red blood cells and eliminates the old cells. It also produces lymphocytes, which are responsible for producing antibodies to fight against diseases.

Physiologic functions in the body are exhibited as biochemical reactions and bioelectrical reactions. Mostly Western medicine focuses on biochemics as a means to healing disease of all forms. In some cases there is success, but not in all cases. When we understand the bioelectrical pathways, also called nerve pathways, effecting organ system function we can arrive at a conclusion about where we need focus our attention to change and improve the health of a patient. This information is founded by science, why not utilize it? These concepts are very straightforward. Please keep an open mind and try to think like a mechanic. As I often tell my patients... like cars we are all made up of the same parts even though we are different makes and models.