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**Lyme Disease**

 Lyme disease is an infectious disease which is caused by the bite of the infected deer tick or black-legged. After the bite, a bacterium is transmitted namely Borrelia. The tick must remain on the skin for a period of two days to spread the infection. The Lyme disease was first discovered in 1975 in Connecticut (“Lyme Disease (Tick-borne borreliosis, Lyme arthritis) Fact Sheet,” n.d.). The people living in wooded areas are prone to get infected by the disease in comparison to other population. Moreover, people possessing domesticated animals have a high risk of contracting the disease.

**Symptoms**

 The disease occurs over a period of three stages listed as follows: early localized disease early disseminated disease and late disseminated disease. In initial stages, the symptoms of the disease are apparent after two weeks of the tick bite. A bull’s eye rash is one of the common symptoms which indicate the bacteria are increasing. The rash is neither itchy nor painful. It disappears after four weeks. Erythema migrans is the formal name of the disease.

 Stage 2 begins after many weeks of the tick bite. The bacteria advance to spread across the body. It is characterized by symptoms like flu as sore throat, fatigue, chills, headaches and fever. Stage 3 initiates when the disease has not been cured in the first two stages. The following signs indicate a person has entered stage 3(“Lyme Disease,” n.d.):

* Arthritis of joints
* Short term memory loss
* The problem to engage in conversations
* Numbness in legs, feet, arms or hands
* Disturbance in heart rhythm

**Targets and Occurrence of the Disease**

 Lyme disease has the potential to affect people belonging to several age groups. The people who frequently spend time in outdoor activities like hiking, golfing, working, camping or playing in wooden and grassy environments are at a greater risk of getting exposed to the virus (“Lyme disease - Diagnosis and treatment - Mayo Clinic,” n.d.). The likelihood of getting bitten by a deer tick also depends on a specific interval in a year. They can be profoundly active when the temperature exceeds 45° F. In Europe and the Pacific Northeast, Northwest and the upper Midwest regions of the United States of America (USA), the disease is the most common tick-borne infection.

 The nymphs, young deer ticks, are active from the mid of May to the mid of August and have a size similar to poppy seeds. Besides, the adult ticks are active from March till May and mid-August till November and have the size similar to sesame seeds. Both these nymphs can spread the disease potentially (“Signs of Lyme disease that appear on your skin | American Academy of Dermatology,” n.d.). These are the times when they are active and thus people are more vulnerable. Throughout the New York State, the infected deer tricks are abundantly found.

 The discussed population ought to take precautionary measures to prevent themselves from getting infected by the Lyme disease (“Clinical Assessment, Treatment, and Prevention of Lyme Disease, Human Granulocytic Anaplasmosis, and Babesiosis: Clinical Practice Guidelines by the Infectious Diseases Society of America | Clinical Infectious Diseases | Oxford Academic,” n.d.). Some of the key measures are listed as follows:

* Wearing long-sleeve shirts and long pants while going outside
* Making the yard unattractive for the ticks by putting woodpiles in the territory exposed to sun and clearing the wooded areas

**Conclusion**

 Lyme disease is an infectious disease transmitted to humans by the bite of a deer tick. People from all age groups are prone to contracting the infection. The population living in wooded areas and in temperatures where the temperature exceeds 45 degrees Fahrenheit is at the risk of being affected by the virus. In addition, the symptoms of the disease comprise three stages as early localized disease, early disseminated disease and late disseminated disease.

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