

Tick Borne Diseases and their Prevention

Yuuka Murakami*

Department of Biology, Utkal University, Odisha, India

DESCRIPTION

The Biology of Ticks is the most inclusive research on tick ecology and tick-transmitted diseases. Ticks are parasitic arachnids that belong to the suborder Ixodida and superorder Parasitiformes. Grown ticks are about 3 to 6 mm in length depending on age, sex, species, and "roundness". Ticks are exterior parasites; they feed on the blood of animals, birds, and sometimes reptiles and amphibians. Ticks can transmit infectious diseases either actively or passively. Once the tick bites the infected person, the pathogen gets ingested into the stomach of the insect and starts to multiply. Thus, the pathogen is delivered to new hosts, typically by biting. The ticks are elongated in shape and comprise a cephalothorax and an abdomen. The capitulum (head) and a flattened, oval-shaped body are called the idiosoma. They consist of four pairs of legs that end in a pair of claws. The tick has no antenna like other insects. Adult ticks have eight legs, although larvae develop from the egg with only six legs. Ticks belong to the phylum Arthropod and class Arachnida.

PREVENTION

They are mostly found in woody and grassy areas where the mammals they feed on survive and travel. They can also be found in urban areas and on beaches in coastal areas. The adult female lays from 1,500-5000 eggs. They help to control the animal population by transmitting diseases. They spread diseases through their saliva in the form of spirochetes, corkscrew-shaped bacteria that travel through the host's bloodstream. There are

many natural repellents that kill ticks, such as Cedar Oil, which is nontoxic to natural ticks, Eucalyptus Oil, which is an effective tick repeller, Neem Oil, Apple Cider Vinegar, and Aromatherapy Essential Oils. Ticks naturally die in cold weather, 3 degrees to 14 degrees Fahrenheit. The American dog tick and Lone Star ticks may disappear as the weather conditions change. Ticks transmit diseases like Lyme disease, tularemia, Crimean-Congo hemorrhagic fever, tick-borne relapsing fever, Q fever, tick-borne spotted fevers, babesiosis, ehrlichiosis, and tick-borne meningoencephalitis. They can sometimes cause life-threatening diseases. Most human beings are affected by Lyme disease through the bites of immature ticks called nymphs. Lyme disease is generally divided into three stages: early localized, early disseminated, and late disseminated, where the symptoms do not appear. The early localized disease usually starts 1 to 3 weeks after the tick bite with symptoms like chills, fever, and rashes. Early disseminated disease occurs 4 to 7 weeks after the tick bite with symptoms of multiple Erythema Multiform (EM) lesions and neurologic conditions. Late-disseminated Lyme disease. After the tick bite, the final stage of Lyme disease occurs in months or years with symptoms of arthritis, encephalopathy, and numbness in the arms, legs, hands, or feet. Drugs used to cure Lyme disease include amoxicillin, doxycycline, and cefuroxime, which are primary treatments in adults and children. Cefuroxime and amoxicillin are used to treat breastfeeding women. For late-disseminated Lyme disease, oral antibiotics are preferred for 28 days. The symptoms include being unable to sleep, pain or swelling in your large joints, fatigue, aching joints or muscles, and short-term memory problems or speech problems.

Correspondence to: Yuuka Murakami, Department of Biology, Utkal University, Odisha, India, E-mail: y.mura@gmail.com

Received: October 06, 2021; **Accepted:** October 20, 2021; **Published:** October 27, 2021

Citation: Murakami Y (2021) Tick Borne Diseases and their Prevention. Entomol Ornithol Herpetol. 10:260.

Copyright: © 2021 Murakami Y. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
