

LYME BORRELIOSIS IN HUMANS AND DOMESTIC ANIMALS AND WILDLIFE

Summary

The bacteria *Borrelia burgdorferi* is the main cause of Lyme disease (*Lyme borreliosis*). The vector of the infection are ticks of the genus *Ixodes*. The most common species in Poland is the tick species *Ixodes ricinus*. The Lyme disease spirochetes are transmitted to the host directly by the bite of infected ticks feeding on the blood of animals that have the disease. The infection can also occur through the contact with the urine, sperm, saliva, nasal discharge or milk of an infected animal.

The source of the *B. burgdorferi* bacteria are rodents, insect-eating mammals, certain animal species of the family Cervidae or Canidae, birds and liz-

ards. Being tolerant to these bacteria these animals are the source of infection for the feeding ticks. In contrast to the free-living animals the symptoms of Lyme disease may appear in the livestock. However, the symptoms are not characteristic, extremely differentiated and similar to the symptoms of other diseases. Therefore, the clinical tests are of little diagnostic value. In the case of a suspicion of borreliosis the application of laboratory tests is necessary to detect the presence of the bacteria *B. burgdorferi* or its components in the tested material or on the measurement of the immunological response to the precisely determined antigens of this bacteria.