

ABSTRACT

Leishmaniasis is an infectious disease affecting a wide range of vertebrates, including humans. *Leishmania donovani* is the causative agent of its most severe form - visceral leishmaniasis. So far animal reservoir has not been proven in the life cycle of this parasite and a man is regarded as the only source of infection. However, zoonotic transmission is demonstrated in the species *Leishmania infantum*, which together with *L. donovani* and *L. archibaldi* belongs into *L. donovani* complex. A lot of domestic and wild animals living near human dwellings are therefore tested for the presence of *Leishmania* DNA or anti-*Leishmania* antibodies, hoping to uncover reservoir host in the life cycle of *L. donovani*. Sensitivity and specificity of the methods significantly affects the results of undertaken studies. The animals play a significant role in the epidemiology of the disease also as a significant blood source for the vectors. Understanding the ecological interactions between parasite, vector, man, domestic and wild animals could lead to more effective transmission control, thus reducing incidence of leishmaniasis in endemic foci.

Key words: *Leishmania donovani*, visceral leishmaniasis, reservoir, domestic animals, wild animals