

ABSTRACT

Leishmaniasis is protozoan diseases, which is transport into the host during the feeding of sand fly. During the feeding of infected sand flies not only the leishmania but also the sand fly saliva are inoculated into the hosts. Sand fly saliva can strongly affect the response of the immune system. If the host hadn't met sand fly saliva yet, the course of infection is usually worse. In cutaneous leishmaniasis, the lesions developed early, being more destructive and persisting longer, if not healed. The hosts living in endemic areas of leishmaniasis and the vector hosts are often exposed to feeding uninfected sand flies. To hosts are repeatedly inoculated the sand fly saliva antigen and induced specific cellular and antibody responses. Cellular and antibody responses are different for different hosts, attempts were made most frequently in murine and canine models. In humans, as host is it difficult to monitor development leishmania infection after previous exposure, that's why in humans mainly it is monitors the levels of antibodies, according to which we can determine the extent of sand fly bitten and the risk of transmission of leishmaniasis. The specificity of immune responses against sand fly saliva is important for the testing new type of controlling and healing programs against sand fly and leishmaniasis.

Keywords: antibodies, IgG, *Phlebotomus*, *Lutzomyia*