

POSTVACCINAL IMMUNITY AGAINST PARVOVIRUS IN URBAN CANINE POPULATIONS OF LITHUANIA

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Summary. It has been observed that parvovirus infection is spreading in Lithuania among vaccinated dogs. For this reason investigation of postvaccinal and passive immunity were carried out which enabled to reveal the causes of unsuccessful immunisations. 160 samples of blood sera of puppies aged 2-6 months were examined. In 117 of them the level of colostral antibodies was evaluated. In the group of adult dogs 110 blood serum samples were investigated. The postvaccination and passive immunity was evaluated by hemagglutination inhibition (HI) determining the titre of antibodies and seroconversion.

Investigations revealed that due to high level of colostral antibodies ($4,32-5,82 \log_2$) the interference of active immunisation occurs in pups aged 2-2,5 month and seroconversion can be observed only in 40 % of cases. A four-fold increase in antibody titres after the second vaccination was observed in 80 % of dogs. The additional third immunisation at the age of 4-4,5 months increases the efficiency of pups vaccination because seroconversion was observed in 93,3-97,5 % of cases, whereas the average values of antibody titres were significantly higher ($p < 0,05$), than after the first two vaccinations. The yearly immunisation of adult dogs increases the titres of protective antibodies by 3-4 \log_2 ($P < 0,05$).

Keywords: parvovirus, canine, seroconversion, vaccination interference.