

EPIDEMIOLOGIC STUDIES OF CANINE PARVOVIRUS INFECTION IN LITHUANIA

A. Stankevičius, A. Šalomskas

Summary. For epidemiologic investigation of parvovirus infection 115 faeces samples from enteritis affected dogs were collected from open dog populations. The tests revealed that 51,3±4,7% of all the tested cases of enteritis had parvovirus etiology. By means of HA and HI methods 4 and 5 month old puppies were found to be more sensitive (80,0±8,9% and 77,8±9,1% positive, respectively) to parvovirus infection than the dogs in the other age groups ($p < 0,05$). Statistically reliable data show a considerable decrease in the number of cases (35,3±11,6%) of parvovirus infection in the group of 7-12 month old dogs. Parvovirus infection in Lithuania is more frequent (81,8-83,3%) in rottweilers and German shepherd dogs ($p < 0,05$). Our investigations have revealed that the number of parvovirus particles excreted with faeces does not depend on dog breeds. However, the titre of excreted viruses was inversely proportional to the age of the puppies.

In closed dog populations 81,4±4,9 % of all the cases of enteritis had parvovirus etiology. Puppies aged 2-3 months are most sensitive (from 93,9±4,9% to 86,4±7,3% positive titre, respectively) to parvovirus infection, whereas the spread of positive cases among 4 month old dogs was significantly lower, i.e. 33,3±15,7% ($p < 0,05$).

Analysis of faeces from dogs with diarrhea revealed that seasonal factors have a negligible effect on parvovirus infection in open dog populations. In closed populations, however, the increase in spring is followed by a decrease in summer, autumn and winter ($p < 0,05$).

Keywords: parvoviruses, canine, epidemiology.