

Canine and feline intestinal trichomoniosis – *Tritrichomonas foetus* or *Pentatrichomonas hominis*?

Dawid Jańczak, Adam Słoński, Aleksandra K. Maj

Veterinary Laboratory ANIMALLAB, Ireny 8, 03-641 Warszawa, Poland

Corresponding author: Dawid Jańczak; e- mail: parazytologia.vet@gmail.com

Among the parasitic factors of chronic diarrhea in cats, special attention is paid to *Tritrichomonas foetus*. Studies using the PCR technique showed a few cases of *Pentatrichomonas hominis* infection or co-infection with *T. foetus*, both in cats and dogs. The aim of the study was to determine the prevalence of *T. foetus* and *P. hominis* in domestic dogs and cats in Poland.

DNA isolates from faeces of dogs (116) and cats (182) were collected from October 2020 to July 2021 in the Animallab Veterinary Laboratory in Warsaw. Stool samples came from animals from all over Poland and included animals of various ages. The isolates were tested by PCR methods, during which genetic markers were analyzed: 347 bp for *T. foetus* (Felleisen et al. 1998; Gookin et al. 2002) and a 330 bp fragment for *P. hominis* (Gookin et al. 2007). The amplification products were

viewed under UV light after the electrophoresis on a 2% agarose gel.

Infection with *T. foetus* was detected in 33 cats (18.13%) and one dog (0.86%). Positive result for *P. hominis* was obtained from stool samples of three cats (1.65%) and seven dogs (6.03%). Not a single case of co-infection has been found. Infection with *T. foetus* was diagnosed in 19 cats (10.43%) aged 3 years and younger. The oldest cat diagnosed with *T. foetus* infection was 10 years old.

Trichomoniosis of the large intestine in cats is a significant clinical problem. Knowledge of feline trichomoniosis should be constantly promoted among veterinarians and cat breeders, including the recommended PCR diagnostics. Differential diagnosis of *T. foetus* and *P. hominis* should be routinely recommended due to the similar clinical symptoms.