Coccidian and Viral Infection in cats

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Toxoplasma gondii and Neospora caninum are worldwide spread coccidian parasites which can cause serious illnesses in immunosuppressed animals. Toxoplasmosis is also important zoonosis. Cats and other felids are only known definitive hosts of T. gondii and only felids can shed oocysts into the environment. Feline immunodeficiency virus (FIV), feline leukemia virus (FeLV) and feline panleukopenia virus (FPV) are important viral infections which can lead to clinical diseases or to immunosuppression and predisposition to other infections. The aim of this study was to determine mutual influence of feline viral and protozoan infection on manifestation of clinical signs. We investigated 111 cats from the Slovenian and Czech shelter houses and veterinarian clinics. Antibodies to T. gondii and N. caninum were detected by indirect Enzyme-Linked Immuno Sorbent Assay in 24 (21.6%) and 7 (6.3%) cats, respectively. Antibodies to FIV and antigens to FeLV and FPV were detected by immunochromatographic screening tests in 12 (10.9%), 6 (5.4%) and 4 (3.6%) cats, respectively. Co-infection was observed in 10 cats (9%): T. gondii and FIV in 6 cats, FIV and FeLV in 2 cats, T. gondii and FeLV in one cat. One kitten with diarrhea and gastrointestinal clinical signs showed co-infection of T. gondii, N. caninum and FPV. In total, 49 (44%) cats showed some clinical signs and in 30 (61%) of them one or more protozoan and/or viral infections was found.

Biography

Radka Lukášová graduated in 2010 from the Faculty of Veterinary Medicine, University of Veterinary and Pharmaceutical Sciences Brno, Czech Republic. Since graduation she has worked at veterinary clinic for small animals as a veterinary doctor, specialised on surgery, cat medicine and exotic pets. Since 2013 she has also studied Ph.D. study at the Department of Biology and Wildlife Diseases. Now she is working on her thesis „Toxoplasmosis and neosporosis in carnivores“. After finishing Ph.D. study, she would like to continue with her work focusing on small animals and also with research in Toronto in Canada, where she is going to move in next year.

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