ISOLATION OF FUNGAL FLORA FROM THE HAIR COATS OF CLINICALLY HEALTHY DOGS AND CATS

Marija Ivaškienė[1], Jūratė Šiugždaitė[2], Algimantas Matusevičius[1], Aidas Grigonis[3], Gintaras Zamokas[3], Vytautas Špakauskas[1]

[1]*Department of Non-Infectious Diseases, Lithuanian Veterinary Academy, Tilžes str. 18, LT-47181 Kaunas, Lithuania, Tel. +370 37363041; e-mail: amatusevicius@lva.lt*

[2]*Department of Infectiuos Diseases, Lithuanian Veterinary Academy, Tilžes str. 18, LT-47181 Kaunas, Lithuania*

[3]*Small Animal Clinic of Dr. L. Kriauceliunas, Lithuanian Veterinary Academy*
Tilžes str. 18, LT - 3022 Kaunas, Lithuania

Summary. Pets are often blamed for transmission of dermatophytes between animals and humans. The purpose of this study was to determine the prevalence of pathogenic and saprophytic fungal organisms on the hair coat of dogs and cats, and to evaluate factors that would have influence on this incidence. During a period of 9 month, one hundred animals (62 dogs and 38 cats) without cutaneous lesions were sampled. Age, sex, hair length and habitat were recorded for each animal and examined as potential risk factors. Results were analyzed by means of statistical package SPSS. The hair coat samples were taken by modified Mackenzie method. The mycological analysis was performed by specimen inoculation and fungal colony cultivation on Sabouraud agar. Saprophytic fungi were identified to genus level, pathogens – to species level. Twelve genera of fungi were isolated. A total of 19 dermatophyte isolates were isolated with *Microsporum canis* in 16.0 %, *Microsporum gypseum* in 2.0 % and *Trichophyton mentagrophytes* in 1.0 % of the samples. *Microsporum canis* was the most common dermatophyte isolated (from 19.3 % and 10.5 %, of dogs and cats, respectively). Further, *Cladosporium* spp. (66,0 %), *Aspergillus spp*. (55.0 %), *Penicillium* spp. (49.0 %) were the most frequently isolated saprophytes. There was a higher incidence of saprophytic fungi in longhaired and in older (more than 2 years) dogs. It was also noticeable from history data that asymptomatic carriage of fungal spores depends on animal living condition. There was no significant difference between sexes of animals. The high prevalence of fungal spores in cats and dogs without clinical symptoms emphasises that pets have a potential for shedding fungi in the environment and thus act as reservoirs for human infection.

Key words: dermatophytes, saprophitic fungi, cats**,** dogs.