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**UPDATING THE PREVALENCE OF CANINE DIROFILARIOSIS IN PET DOGS IN
NOVI SAD, VOJVODINA, SERBIA**

Ljubica Spasojevic Kosić¹, Stanislav Simin¹, Vesna Lalosević¹, Ljiljana Kuruca¹,
Sandra Nikolić², Danijela Nerac²

¹ University of Novi Sad, Faculty of Agriculture, Department of Veterinary Medicine, Novi
Sad, Serbia

² Clinic for small animals, JKP''Zoohygiene and Veterina'', Novi Sad, Serbia

Introduction

Nematodes of the genus *Dirofilaria* are currently considered emerging agents of parasitic zoonoses in Europe. Climate changes, the existence of animal reservoirs (domestic and wild canines), and global movement of dogs have caused an increase in the spreading of these mosquito-borne nematodes. Although data concerning prevalence of both *Dirofilaria* infections in Serbia have been published, it is of interest for human and veterinary medicine to follow up these infections among dogs.

Objectives

The aim of this study was to update the prevalence of *Dirofilaria* infections in pet dogs.

Material and methods

From the year 2010 to the year 2014 pet dogs from Novi Sad were tested for *Dirofilaria* infections. This research was done in 128 privately owned pet dogs. At the moment of testing, dogs were at least 7 months old, exposed minimally to one mosquito season and without history of treatment with macrocyclic lactones. All samples were examined by wet blood smears, the modified Knott test and heartworm antigen test (Canine Heartworm antigen test kit, Idexx Laboratories, Inc.).

Results and discussion

Among examined dogs 45 (35.16%) dogs had clinical signs, while the rest of the dogs were asymptomatic. Circulating microfilariae of *D. immitis* were found in 14 dogs, while circulating microfilariae of *D. repens* were found in 22 dogs. Prevalence values for *D. immitis* and *D. repens* were 16.41 % and 17.19 %, respectively. In 8 dogs (6.25%) infection with both *D. immitis* and *D. repens* were detected. Results of this study, compared with results of previous investigations in Novi Sad, shows increase of infection with *D. immitis*, decrease of infection with *D. repens*, and increase of infection with both *D. immitis* and *D. repens*. Further investigations are required with higher number of samples to confirm these findings.

Conclusion

This study reveals a 10.16% prevalence of *D. immitis* as single infection, 10.94% prevalence of *D. repens* as single infection, and 6.25% prevalence of mixed infections with both *Dirofilaria* in pet dogs in Novi Sad.

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