THURSDAY, 3 JULY, 2014 · 17:15-17:30
OVERVIEW OF DIROFILARIOsis IN SERBIA DURING THE LAST TEN YEARS 2004-2014 AND CURRENT STATUS OF THE DISEASE
Sara Savic1, Branka Vidic1, Pajkovic Dusan2, Ljubica Spasojevic-Kosic3, Strahinja Medic4, Aleksandar Potkonjak3, Suzana Otašević3
1 Scientific Veterinary Institute „Novi Sad”, Novi Sad, Serbia
2 Army of Serbia, Novi Sad, Serbia
3 Agricultural Faculty, Department for Veterinary Medicine, University of Novi Sad, Serbia
4 Private Veterinary Laboratory „Vet Lab“, Belgrade, Serbia
5 Institute for Public Health, Medical Faculty, University of Nis, Serbia

Introduction
Dirofilariosis is a vector borne zoonosis mostly caused by Dirofilaria immitis and Dirofilaria repens. The first dirofilariosis case was reported in Serbia in 1998. The first cases of dirofilariosis were discovered as a side finding during the dissections of dogs. Since 2003/2004, veterinary laboratories started doing a regular routine check in dogs for dirofilariosis.

Objectives
In this paper we would like to give an overview of the situation with dirofilariosis in Serbia as an example of spreading of dirofilariosis to the central parts of Europe.

Materials and Methods
Methods used in all of the laboratory diagnostic were ELISA tests and modified Knott test, which were performed in the blood samples of dogs of different origin and location.

Results
In 2003-2004, seroprevalence for dirofilariosis in dogs was 5.9-7%. In 2006-2007, seroprevalence in dogs with no clinical symptoms was 10-11%. But in dogs with clinical symptoms, seroprevalence was 80%. During 2010, seroprevalence in working dogs went up to 14%, in pet dogs it was 11% but in urban regions it was even 20%. During the period from 2011-2013 five human cases of dirofilariosis were reported in Serbia. Finally, during 2013-2014, 78 samples were analysed for dirofilariosis. From hunting dogs, 59 samples were analysed and 19 samples from working dogs were analysed for dirofilariosis. In total, seroprevalence for dirofilariosis was 26.9%.

Discussion and conclusion
Dirofilariosis in Serbia went from a side finding in dogs, from occasional to frequent finding in dogs with no symptoms, then in dogs with symptoms and finally human cases were found. It has become a significant zoonosis which should be in the focus of veterinarians and medical doctors. During the period of 10 years, seroprevalence in dogs went from 7% to 26.9%. A one health concept and perspective should be performed if we want to win a fight with dirofilariosis. Currently a research among human population is being performed and also research on vectors and presence of Dirofilaria in them.

Acknowledgements
This study was supported by the grant TR31084 of the Ministry of Education, Science and Technological Development of the Republic of Serbia.