

**Spirocerosis of dogs in spread Belgrade area**

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**Abstract**

Spirocerosis is a parasitic disease caused by the nematode *Spirocerca lupi*. Parasites mostly occurring in warm climates and increasingly in Mediterranean areas and West Balkan.

The parasite development cycle involving intermediate hosts (coprophagous beetles - Scarabidae), paratenic hosts (amphibians, reptiles, birds, and small mammals) and domestic or wild canids as the main definitive host (dogs, foxes). Dog infections originated by the ingestion of intermediate hosts which carrying infective larvae (L3).

The infective larvae are released into the stomach, penetrate its mucosa and begin a strikingly predictable migration, reaching the thoracic aorta within 3 weeks. Most of the larvae leave the aorta approximately 3 months after infection and cross over to the esophagus, where they incite the development of granulomatous nodules as they mature to adults over the next 3 months. Spirocerosis in dogs has been mostly associated with the aortic aneurysms; hypertrophic osteopathy; mid-thoracic spondylitis; salivary gland necrosis; pyothorax; and esophageal granulomas which may transform to sarcoma of connective tissue whose metastases are found in the lungs and bones. The mortality rate is up to 95%.

The first case of spirocerosis of dogs in Serbia was recorded in Belgrade during 2014 and in the latter period (until 2019). we occurred another 18 cases in spread Belgrade area, but it was not

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established in other parts of Serbia. In all dogs in whom spirocercosis was established, the dominant clinical symptoms were increased salivation and difficulty swallowing. In one case, cough and breathing were noticed. In all cases, the diagnosis was made by finding of parasite eggs, followed by endoscopic examination during which the characteristic nodular crevices and the presence of parasites in them were observed in the esophagus. Unfortunately, in all cases there was a lethal outcome due to metastatic tumors.

## Biography

Ivan Pavlovic, PhD, MVSc, DVM was born in Belgrade on 1958. He had graduated and completed PhD at faculty of veterinary medicine in Belgrade. He is head of laboratory of parasitology in scientific veterinary institute of Serbia. There are on the EFSA, WHO and FAO experts list and are the holder of several international and national awards and recognitions. He has member of academy of veterinary medicine and Russian academy of natural science. He has published 4 university book, 16 books, 4 atlas, 1 handbook, more than 300 papers in scientific journal and more than 500 papers at symposium and conferences. He was author of methods of examination of soil and sand to presence of parasites eggs. (The Intellectual Property Office, certificate.2770/2017A-0098/2017). He participated in numerous scientific projects.

## Publications

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**Abstract citation:** Ivan Pavlovic, Spirocercosis of dogs in spread Belgrade area, *Veterinary Medicine* 2021, 2nd World Congress on Veterinary Medicine, May 26-27, 2021.  
Conference Link: <http://veterinarymedicine.pulsusconference.com/>

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