Prevalence of Canine Leptospirosis in Namakkal, Tamilnadu by Dark Field Microscopy (DFM)

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Abstract
Leptospirosis is a bacterial disease, caused by pathogenic serovars of Leptospira interrogans. 250 sera samples from affected and apparently healthy dogs were collected at Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal for a period of one year from (May 2014 to April 2015) and subjected to dark field microscopy examination. Out of 250 sera samples screened, 35 samples were found positive for leptospires organism with of 14.00 per cent positivity.

Key words: Canine leptospirosis, Dark field microscopy, Prevalence.

Canine leptospirosis is a fatal disease caused by members of the genus Leptospira. In dogs, it is characterized by fever, vomiting, diarrhoea, myalgia and other signs consistent with hepatic and renal insufficiency. Infected dogs may be carrier of leptospiroa organism for 1-2 years in subclinical form (Rad et al. 2004). The aim of the present study is to investigate the prevalence of canine leptospirosis by Dark field microscopy examination

Materials and Methods
A total of 250 sera samples were collected from dogs which were brought to Teaching Veterinary Clinical Complex (TVCC), Veterinary College and Research Institute, Namakkal for a period from May 2014 to April 2015.

Two milliliters of blood was collected and were centrifuged at 1000 X g for 15 min, and the serum was separated (Jaiswall et al. 2015). A drop of sera samples were examined by DFM.

Results and Discussion
Demonstration of the leptospires organism by DFM appears to be a simple and rapid method. In the present study, 250 sera samples were screened, 35 samples were found positive for leptospirosis with 14 % positivity. (Nath et al. 2010, Greene et al. 2012, Krishna et al. 2012) used the DFM in the diagnosis leptospires in dogs. In the present study the observed positivity was lower than the reports of (Ramadoss et al. 1997 and Karthikeyan. 2004) who observed 29.23% and 23.52 % respectively in Tamil Nadu.

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References


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