## **36. OCCURRENCE OF ANTI-LEPTOSPIRA** ANTIBODIES IN DOGS IN THE SOUTHWESTERN REGION OF THE STATE OF SÃO PAULO

A ocorrência de anticorpos anti-*Leptospira* em cães na região sudeste do estado de São Paulo

GOMES, N.;<sup>1</sup> SOUZA-FILHO, A.F.;<sup>2</sup> GONÇALES, A. P.;<sup>1</sup> PINTO, C. M.;<sup>1</sup> ONOFRIO, V.C.;<sup>1</sup> SOUZA, G.O.;<sup>2</sup> GUEDES, I. B.;<sup>2</sup> ABREU, J. A. P.;<sup>2</sup> CORTEZ, A.;<sup>1</sup> HEINEMANN M. B.<sup>2</sup>

<sup>1</sup>Universidade Santo Amaro (Unisa), São Paulo/SP, Brazil. <sup>2</sup>Laboratory of Bacterial Zoonoses, Department of Preventive Veterinary Medicine and Animal Health (VPS), School of Veterinary Medicine and Zootechny (FMVZ), Universidade de São Paulo (USP), São Paulo/SP, Brazil. E-mail: marcosbryan@usp.br

Introduction: Leptospirosis is an emerging disease with different prevalence in dogs' populations. Dogs play an important role in the disease epidemiology, acting as accidental or maintenance hosts. Infective serovars present different geographic distribution among these populations, depending on exposure to hosts from infected wild or domestic animal reservoirs. The most common serovars that infect dogs, prior to the introduction of the vaccines against leptospirosis, were Icterohaemorrhagiae and Canicola. **Objective:** To analyze the occurrence of anti-*leptospira* antibodies in dogs from southwestern region of the state of São Paulo, using the microscopic agglutination test (MAT). **Methods:** Blood samples were collected from 449 dogs, during campaign of population control of dogs by UNISA – Projeto Extensão Universitária and Projeto Rondon<sup>®</sup>SP in the municipalities of Apiai, Cananéia and Itapeva (Southwest Region of São Paulo State). After the blood serum was obtained, the samples were submitted to microscopic agglutination test (MAT) using 24 serovars representing 18 Leptospira spp serogroups. There was no information about previous vaccinations against leptospirosis. **Results:** From the total of 449 samples, 136 (30.29%) were reagents, with titers ranging from 100 to 25600 for 16 of the 24 serovars tested. All the reagents animals were from the municipality of Itapeva. The most probable reagent serogroup was Icterohaemorrhagiae (61,86%) with titers ranging from 100 to 12800. The second most reagent serogroup was Canicola (16.10%) and titers ranging from 100 to 25600, followed by Cynopteri (9.32%), Ballum and Sejroe (4.24%), Autumnalis (3,39%), and Hebdomadis (0.85%). **Conclusion:** Anti-*leptospira* antibodies were present in dogs from Itapeva municipality, São Paulo state, Brazil, with predominance of reactions against *L. interrogans* serogroups Icterohaemorrhagiae and Canicola. The campaign of population control of dogs can be applied as a surveillance system for leptospirosis and other diseases in the dog population. **CEUA:** CEUA/UNISA No 35/2012 AND 19/2014. **Funding:** CNPq (MBH fellowship), Capes (Finance code 001).

## **37. OUTBREAK OF ACUTE LEPTOSPIROSIS IN SOWS**

Surto de leptospirose aguda em porcas

DICK, G;<sup>1</sup>FARIAS, D.K.;<sup>2</sup>NASCIMENTO, J;<sup>1</sup>CUNHA, A.P;<sup>1</sup> COELHO, M. E.;<sup>1</sup> THOMÉ, J.;<sup>1</sup> RECK, C.;<sup>3</sup> MENIN, A.<sup>1</sup> <sup>1</sup>Universidade Federal do Estado de Santa Catarina (UFSC), Florianópolis/SC, Brazil. <sup>2</sup>Universidade do Estado de Santa Catarina (Udesc), Florianópolis/SC, Brazil.

<sup>3</sup>VERTÁ – Laboratory of Veterinary Diagnostic / Institute of Veterinary Research and Diagnostic.

E-mail: alvaro.menin@ufsc.br

Introduction: Leptospirosis is an important zoonosis that causes reproductive disorders in swine of worldwide. There are also human occupational disease exposure risks. In swine, the clinical signs, which include abortion and infertility, varies according to the infecting serovar. Serovars not adapted to the swine frequently cause severe disease and large herd productive losses. Objective: Report an outbreak of acute leptospirosis in herd with 1200 sows. Methods: Sixteen samples of placenta, liver, kidneys, lungs, heart, spleen and gastric content of piglets aborted were taken and examined by PCR assay to Erysipelothrix rhusipathiae, Porcine Parvovirus, Chlamydia sp., Mycoplasma sp. and Leptospira spp. Serum samples from 83 sows aborted were examined for leptospira antibodies with 20 reference leptospira serovars by a microscopic agglutination test (MAT). Results: Swine herd with 1200 sows, presented 18% of the abortion, fever and anorexia. Abortion was observed in different stages of pregnancy. Eleven samples of placenta, liver, kidneys, lungs, heart, spleen and gastric content of piglets aborted were positive for Leptospira spp. in PCR. The analysis of serum samples from 83 sows with 20 reference leptospira serovars by a microscopic agglutination test (MAT) revealed that the cause of abortion was infection by Leptospira interrogans