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RESUMOS

Consensos em Leptospirose II e I Simpósio Internacional de Medicina Legal Veterinária

CLÍNICA DE PEQUENOS ANIMAIS

Estudo descreve as principais alterações clínicas e laboratoriais observadas em cão intoxicado por veneno de sapo identificado como sendo *Rhinella icterica*

NUTRIÇÃO ANIMAL

Pesquisa mostra resultados de avaliação de parâmetros clínicos e laboratoriais de equinos quarto-de-milha, suplementados com gama-orizanol e L-carnitina antes e após execução da prova de três tambores

for the serogroups Icterohaemorrhagiae (62.3%), Grippotyphosa (22.2%), Canicola (13.3%), Djasiman (2%) and Pomona (2.2%). The f risk factors identified were: age from 49 to 72 months (odds ratio = 2.74), Age > 72 months (odds ratio = 3.22), and monthly cleaning of the environment where the animals are kept (odds ratio = 10.7). **Conclusion:** It is concluded that dogs attended in private veterinary clinics in João Pessoa, Paraíba, Brazil are exposed to infection by *Leptospira* sp. with predominance of serogroups maintained by wild animals. It is suggested that the cleaning frequency of the environment where the animals live should be improved. **CEUA:** This experiment was approved and performed under the guidelines of Ethics Committee for Animal Protocol Use of Federal University of Campina Grande (Protocol No. 010.2016).

43. PRODUCTION OF LEPTOSPIRAL IMMUNOGLOBULIN-LIKE PROTEINS FUSED TO ZZ AND/OR R DOMAINS AND/OR HIV-1 TAT PROTEIN

Produção de proteínas semelhantes à imunoglobulina leptospiral fundidas às proteínas ZZ e/ou domínios R e/ou do HIV-1 TAT

MONARIS, D.;[1] SAVATIER, A.;[2] HO, P.L.;[1] LÉONETTI, M.;[2] ABREU, P.A.E.[1]
[1]Laboratory of Bacteriology I, Instituto Butantan, São Paulo/SP, Brazil.
[2]Institut de Biologie et de Technologies de Saclay, Saclay, France.
E-mail: denizemonaris@gmail.com / denize.monaris@butantan.gov.br

Introduction: Leptospirosis is a zoonotic disease caused by pathogenic spirochetes of the genus *Leptospira* which colonize the renal tubules of wild or domestic animals and are released to the external environment in urine. The development of a vaccine is very important, since the control of carrier animals is difficult. Some vaccines are being used, but they promote protection only against the serotypes present in the preparation and fail to induce long-term immunity. The LigA and LigB proteins are able to induce immunoprotection against leptospirosis, however, it didn't confer sterilizing immunity. **Objectives:** The aim of this study was the cloning, expression, purification and structural characterization of recombinant LigA and LigB proteins fused to the ZZ domain of protein A from *Staphylococcus aureus*, R domain of diphtheria toxin and the TAT protein of the HIV virus. **Methods:** The LigAC, LigBC (carboxy-terminal portion) and LigBN (amino-terminal portion) were cloned into the expression vector pCP by *SLICE Cloning* technique. The recombinant proteins were expressed in *E. coli* and purified by affinity chromatography and analyzed by circular dichroism spectroscopy. The antigenicity of fusion proteins was evaluated by *ELISA* using sera from hamsters immunized with purified recombinant proteins. **Results:** Each purified recombinant protein showed a major band with expected molecular mass and the structural integrity revealed a predominant b-sheet secondary structure. Robust antibody responses against recombinant proteins were detected in hamsters by *ELISA* analysis. The vaccine potential of these fusion proteins will be tested in challenge studies using hamster model. **Conclusions:** The purification and refolding process was successfully obtained. It is expected that this approach may contribute to increase the immunogenicity of the recombinant proteins through the increased efficiency of antigen presentation processes to the immune system in order to provide a sterile immunization. **CEUA:** 7643121115. **Funding:** FAPESP 2015/19445-8, CNPq and Butantan Foundation.

44. RESEARCH OF ANTIBODIES AND DNA OF *LEPTOSPIRA* SPP. IN BOVINE FETUSES NON-ABORTED COLLECTED IN SLAUGHTERHOUSE

Pesquisa de anticorpos e DNA de *Leptospira* spp. em fetos bovinos não abortados coletados em matadouro

GUEDES, I. B.;[1] SOUZA, G. O.;[1] CASTRO, J. F. P.;[1] SOUZA-FILHO, A. F.;[1] CORTEZ, A.;[2] HEINEMANN, M. B.[1]
[1]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.
[2]Veterinary Medicine Course, Universidade Santo Amaro, São Paulo/SP, Brazil.
E-mail: marcosbryan@usp.br

Introduction: Leptospirosis in production animals is characterized by reproductive interference such as infertility, birth of weak calves, stillbirths and abortions, the latter due to infection of the fetus by *Leptospira*, leading to the death of the animal and its elimination, being possible the bacteria detection in samples of these abortions.

Objective: Detect anti-*Leptospira* antibodies in cavity liquids and bacterial DNA in the organs and gastric contents of non-aborted bovine fetuses collected from a slaughterhouse. **Methods:** In a slaughterhouse in the Baixo Tocantins, Pará region, during the slaughter line of bovine females, 58 fetuses at different stages of gestation were collected at random. These animals were necropsied, and during this procedure when observed macroscopic pathological alterations in the organs, was record. The fetal cavity fluids were submitted to the microscopic agglutination test (MAT, cut-off ≥ 5) to investigate anti-*Leptospira* antibodies; a pool of organs (lung, liver, spleen and kidney) and the gastric contents of each fetus were subjected to polymerase chain reaction (PCR) to detect bacterial DNA. **Results:** None of the 58 fetuses were reactive in serology and neither the DNA of *Leptospira* spp. was detected in the organ and gastric contents of the animals, but in 17.24% of the animals (10/58) macroscopic lesions were found: yellowish liver (80%) and edema and hemorrhagic organs (20%). **Conclusion:** No anti-*Leptospira* antibodies or bacterial DNA were detected in the fetuses, even though, in some animals, macroscopic pathological changes suggestive of leptospirosis were observed. **CEUA:** CEUA/FMVZ/USP No 5893100816. **Funding:** CNPq (MBH fellowship), Capes.

45. SEROPREVALENCE OF LEPTOSPIROSIS IN HORSES WITH REPRODUCTIVE DISORDERS

Soroprevalência de leptospirose em cavalos com transtornos reprodutivos

FARIAS, D. K.;[2] DICK, G.;[1] CUNHA, A. P.;[1] NASCIMENTO, J.;[1] COELHO, M. E.;[1] THOMÉ, J.;[1] RECK, C.;[3] SAITO, M.E.;[2] MENIN, A.[1]

[1]Universidade Federal do Estado de Santa Catarina (UFSC), Florianópolis/SC, Brazil.

[2]Universidade do Estado de Santa Catarina (Udesc), Florianópolis/SC, Brazil.

[3]Laboratory of Veterinary Diagnostic / Institute of Veterinary Research and Diagnostic (VERTÁ).

E-mail: alvaro.menin@ufsc.br

Introduction: Leptospirosis is an important zoonotic-disease of global importance and worldwide distribution that cause reproductive failure (abortions/stillbirths) and uveitis in horses. The horses are susceptible to different f *Leptospira* spp. serovars, and the prevalence may vary according to region, seasonality, and risk factors. **Objective:** To determine the prevalence of anti-*Leptospira* spp. antibodies in horses with clinical reproductive disorders, in the state of Santa Catarina, Brazil. The presence of possible risk factors was also observed. **Methods:** Serum samples of 1095 horses with clinical reproductive disorders were evaluated. This samples were collected in different regions of the State of Santa Catarina, Brazil and tested for anti-*Leptospir*a spp. antibodies by microscopic agglutination test (MAT). The tests were performed at the Laboratory of Infectious Diseases (CCR/UFSC). **Results:** The prevalence of anti-*Leptospira* spp. antibodies found was 22.6% (248/1095). Higher prevalence was observed in Vale do Itajaí and Florianópolis, 29,3% (74/252) and South of Santa Catarina State, 26.9% (41/152), respectively. The most reagent serogroups were Icterohaemorrhagiae (24%), Grippotyphosa (20.90%) and Canicola (15.70%). The main risk factors identified were relationship with wild animal and other species of domestic animals such as dogs, cattle and sheep. **Conclusion:** The high frequency of anti-*Leptospira* spp. antibodies in the horse herd from Santa Catarina state, Brazil, shows the need of specific measures to control and surveillance this important zoonotic pathogen. **CEUA:** 4299250816. **Funding:** Capes.

46. SOROPREVALÊNCIA DA LEPTOSPIROSE EM ANIMAIS E HUMANOS DOMICILIADOS NAS PROXIMIDADES DE ÁREA DE FRAGMENTAÇÃO FLORESTAL NO ESTADO DO PARÁ, BRASIL

Serum prevalence of leptospirosis in animals and humans domicilated in the surroundings of forest fragmentation area in the state of Pará, Brazil

MONTEIRO, T. R. M.;[1] HONORIO, B. E. T.;[1] GOMES, M. E. T.;[1] REIS, T. A.;[1] ELERES, H. N. F.;[1] BRITO, J. S.;[2] MESQUITA, G. S. S.;[2] ROSÁRIO, M. K. S.;[2] ROCHA, K. S.;[2] MORAES, C. C. G.[1,2]

[1]Laboratório de Zoonoses e Saúde Pública, Faculdade de Medicina Veterinária, Universidade Federal do Pará (UFPA), Castanhal/PA, Brasil.

[2]Programa de Pós-Graduação em Saúde Animal na Amazônia (PPGSAAM), Universidade Federal do Pará (UFPA), Castanhal/PA, Brasil.

E-mail: ccmoraes@ufpa.br

Introdução: A leptospirose é uma antropozoonose infectocontagiosa causada por espiroquetas do