

04. ASYMPTOMATIC LEPTOSPIRAL INFECTION IS ASSOCIATED WITH CANINE CHRONIC KIDNEY DISEASE

Infecção leptospiral assintomática é associada à doença renal canina crônica

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Introduction: There are scarce studies associating asymptomatic leptospiral infection with chronic kidney disease (CKD) in dogs, recent research has suggested that in human being asymptomatic renal colonization is a neglected risk for CKD, especially in endemic areas. **Objective:** Investigate whether the occurrence of CKD may possibly be associated with asymptomatic leptospiral infection in dogs in endemic regions. **Methods:** It was studied 64 dogs, divided into group A and B. Group A (N 16) adult dogs with confirmed diagnosis of CKD and Group B (N 48) healthy dogs control group. The study was conducted on an endemic area for leptospirosis (São Gonçalo/RJ, Brazil). Serology (MAT) and urine PCR were performed in dogs of group A and B. Dogs with CKD were diagnosed based on ultrasonography, hematological (BCC), biochemical and urinalysis tests. For each dog DRC (group A), three healthy dogs of the same age, sex and neighborhood were studied (Group B) and submitted to the same exams. Blood and urine were collected by three collections divided into monthly collections for three months. **Results:** In the serology group A, the dogs that presented exposure, were defined by titles ≥ 100 (12/16, 75%). In group B, 25% were exposed (12/48) and presented titers of 100. For both groups, the reactions observed were directed against serogroups Icterohaemorrhagiae (58.4%) and Canicola (41.6%). In group A, 12/16 animals (75%) were positive, whereas in group B, 10/48 animals (20.8%) presented a positive result, a significant difference ($p = 0.0002$, RR 3.3). As for amplicon sequencing, all five amplicons that were sequenced were confirmed as *Leptospira* sp. All animals in Group

A presented their hematology tests and ultrasound altered, confirming the diagnosis of chronic kidney disease. **Conclusion:** Our results demonstrate that asymptomatic leptospiral infection is associated with canine chronic kidney disease and that differential diagnosis is important for dogs from endemic areas presenting CKD. The early detection of shedders, besides the obvious impact on public health may also help to improve the animal health and avoid the development of CKD. **Ethics Committee approval number:** 709/2015. **Funding:** This study was supported by the Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro (Faperj).

05. AVALIAÇÃO DE MÉTODOS DIAGNÓSTICOS DE INFECÇÃO POR LEPTOSPIRA SPP. EM SUÍNOS ABATIDOS PARA CONSUMO

Evaluation of diagnostic methods of infection by *Leptospira* spp. in pigs slaughtered for consumption

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Introdução: As leptospiroses são zoonoses de importância global, causadas por leptospiras patogênicas que acometem os animais domésticos, silvestres e o homem.

Objetivo: Avaliar três técnicas para diagnóstico de *Leptospira* spp. em suínos abatidos para consumo.

Metodologia: 139 suínos abatidos nas cidades de Teresina-PI e Timon-MA foram utilizados. Obteve-se o soro para realização da soroaglutinação microscópica (SAM). Fragmentos de rim foram fixados em formol tamponado para imunoistoquímica e em meio RPMI com glicerol a 10% para realizar a PCR. **Resultados:** Pela SAM, oito animais foram positivos. A técnica de