imunoistoquímica detectou marcação positiva para antígeno de *Leptospira* spp. em 60 animais. A técnica de PCR revelou sete animais positivos. O diagnóstico de leptospirose é complexo, pois, dos três métodos utilizados, apenas a IMH detectou antígeno onde a sorologia também detectou infecção, mas a recíproca não é verdadeira, e a sorologia e IMH detectaram infecção onde a PCR não detectou. A comparação dos três testes utilizados para o diagnóstico de infecção por leptospiras revelou que a imunoistoquímica apresentou sensibilidade de 53,6% e 53,1% comparada à sorologia e PCR, respectivamente, e especificidade de 100%. **Conclusão:** Os resultados mostraram que a imunoistoquímica constitui um diagnóstico específico e sensível e pode ser usada para complementar o diagnóstico de leptospirose quando for possível a colheita de amostras de tecido.

06. BASIC MICROBIOLOGY OF *LEPTOSPIRA* SPP.: A TOOL FOR IMPROVING STUDIES ON LEPTOSPIROSIS

Microbiologia básica de *Leptospira* spp.: uma ferramenta para melhorar estudos sobre leptospirose

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Introduction: Leptospirosis is a zoonosis with a high incidence worldwide, caused by spirochetes belonging to the genus *Leptospira*. The maintenance of the strains and the *in vitro* growth of the microorganism remain time-consuming and difficult to be performed. Demonstrating the need to optimize laboratory culture techniques, towards improving studies in leptospirosis. **Objective:** The objective of this work was to evaluate different conditions for the *in vitro* growth of *Leptospira* spp. and the corresponding virulence in an animal model for acute leptospirosis. **Methods:** *L. interrogans* strains L1-130 and RCA and *L. kirschneri* strain UFPel-61H were cultured under different conditions *in vitro* using commercial EMJH culture medium (Difco) and homemade EMJH supplemented with rabbit serum (EMJH++) using different temperatures (28 °C and 37 °C), flasks and inocula (10^0 to 10^4) to evaluate the growth dynamics of the bacteria. Leptospires at different stages of bacterial growth were used to evaluate their impact on virulence in the hamster model for acute infection. **Results:** All of the *in vitro* conditions were viable for leptospiral growth, with the exception of the Difco culture medium at 37 °C. The highest bacterial densities (10^9 leptospires/ml) and the best doubling times were obtained with the Difco medium at 28 °C, especially when associated with orbital agitation. The EMJH++ medium was the most efficient with a low initial inoculum (1 leptospire), especially for *L. interrogans* strains. The *in vivo* experiments demonstrated that growth in Difco medium at 28 °C was more suitable for maintaining the stability and virulence of leptospires across the different bacterial growth stages. **Conclusion:** In conclusion, *in vitro* growth conditions influenced leptospiral virulence, demonstrating the importance of understanding the dynamics of *in vitro* growth of the microorganism. The standardization of leptospires culture techniques will improve the reproducibility of experiments involving pathogenic leptospires. **CEEA UFPel:** 4337-2015.
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07. BOVINE LEPTOSPIROSIS: MOST PREVALENT SEROGROUPS IN THE MUNICIPALITY OF NOVO REPARTIMENTO - PARÁ

Leptospirose bovina: sorogrupos mais predominantes no município de Novo Repartimento, Pará

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Introduction: In cattle, leptospirosis is particularly manifested by reproductive disorders, leading to losses in the production of these animals. Once the disease is present in a herd, control becomes difficult, especially by the adaptation of the bacterium to the animal species and can become a reservoir and/or maintenance host, such as serovars of the Sejroe serogroup for cattle. **Objective:**