SUB-ÁREA: Leptospirose em Animais de Produção e Equinos

Genital leptospirosis syndrome in pregnant mares: a case series reporting different antimicrobial treatments and pregnancy outcome

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Although leptospirosis is recognized as one of the main causes of reproductive problems in horses, little is known about treatment in this species, especially regarding the recently described genital syndrome. This study aims to report pregnancy outcomes and the use of doxycycline and/or trimethoprim-sulfadiazine in the treatment of pregnant mares diagnosed with genital leptospirosis syndrome. All cases were seen in a breeding farm in Antonio Cardoso, Bahia State, Brazil, which has a high incidence of pregnancy problems, such as abortions and placentitis. In total, there were 51 mares during the 2023 season. Mares were kept in fields and had access to natural water sources. Pregnancy monitoring was performed monthly by a trained team. When fetoplacental alterations were observed in the ultrasonographic assessment, cervico-vaginal mucus samples were collected by manual external palpation of the cervix and sent to the laboratory for leptospirosis PCR screening. Of the 51 mares, 14 were PCR-positive (27.4%), all between the 200th and 295th day of pregnancy. Therapy choice was based on ultrasonographic and clinical findings, hormonal assessments, PCR results and personal experience of the clinician. Independently of antimicrobial choice, all mares were treated with flunixin meglumine 1.1mg/kg, IM, SID for five days. Doxycycline treatment (compounded doxycycline 10mg/kg, PO, BID, 10 days) was performed in six positive mares (DOXY group). Other five positive mares were treated with trimethoprim-sulfadiazine (Tridiazin® Vansil, 30mg/kg, PO, BID) (SULFA group). Two mares were treated with both doxycycline and trimethoprim-sulfadiazine in different occasions, following the same criteria beforementioned (DOSU group). One mare was not treated with antimicrobials (financial constrain) and had a foal with altered leucogram, but otherwise healthy. In the DOXY group, one mare aborted, four foals were immature/underweight and one foal was normal. As for the SULFA group, one mare foaled a normal foal, two mares aborted and two had stillbirths. In the DOSU group, one mare foaled a normal foal and the other an immature foal. In this case series, the doxycycline protocol showed better pregnancy outcomes, compared to trimethoprim-sulfadiazine. Nevertheless, it is noteworthy that the non-antimicrobial-treated pregnancy also had a positive outcome. Controlled trials are encouraged for a comprehensive assessment of treatment protocols for equine genital leptospirosis.

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