Acceleration and deceleration of fetal cardiac frequency during last week gestation of Santa Inês ewes: preliminary results
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The acceleration/deceleration process in human and canine fetuses during the last gestational week has been shown to be an indicator of the ideal moment of parturition. This process begins 72 hours before the birth and intensifies in the last 6 hours. In ewes, these changes have not been described and can be very useful in the prediction of parturition and identification of fetal maturity. This study aimed to evaluate the fetal heart rate (FHR) during the last gestational week and to identify the occurrence of the acceleration/deceleration process in ewes. Fifteen pregnant Santa Inês ewes were evaluated by ultrasonography twice a day during the last gestational week. Fetal heart rate was obtained by the measurement of the pulsed Doppler tracing and this parameter was correlated with the hours before parturition (HAP) by the Pearson test. The acceleration/deceleration phenomenon was identified as positive when, during the 5-minute B-mode visual evaluation, a variation greater than 20% of the fetal heart rate was subjectively observed. The evaluation ranged from 276 to 0.4 (HAP), the HRF was 132.5±16.9 bpm (range 93-203 and 95% CI-130-136 bpm) in this period and did not present a correlation with (p=0.965), single (132.5±17.6 bpm), or twin (132.6±15.0 bpm) were observed in the pre-labor hours (r=-0.106; p=0.166). The fetal heart acceleration/deceleration process was observed in 24 of the 173 evaluations performed (14%), with 67.2±55 HAP with a variation in the FHR between 87-176 bpm. Apparently, fetal heart rate and acceleration/deceleration are not related to the time of parturition in ewes.

Keywords: sheep, labor forecast, ultrasound.