DESCRIPTİON OF VİTAL PARAMETERs AND VİTALİTY OF LAMBS BORN BY NORMAL DELIVERY

Fernanda Bovino1, Diogo Gaubeur Camargo1, Lucas Vinicius Shigaki de Matos2, Juliana Regina Peiró1, Luiz Cláudio Nogueira Mendes3, Francisco Leydson Formiga Feitosa1

1Master`s Student, 2Undergraduate Student, 3Department of Clinics, Surgery and Animal Reproduction, Univ Estadual Paulista - UNESP, Araçatuba, Brazil

Aim: The aim of this study was to evaluate the vital parameters and vitality changes in lambs born by normal delivery.

Methods: Fifteen lambs, Suffolk half-breed, derived from 12 normal labor, were evaluated on a farm in Araçatuba, São Paulo, Brazil. They were examined at birth, 15 and 60 minutes, 24 and 48 hours after the birth for: heart rate (HR), respiratory rate (RR), rectal temperature, capillary refill time (CRT) and mucous membranes color. The vitality was evaluated using Apgar score and measuring the time intervals between birth and sternal recumbency (SR); between SR and standing up; and between birth and first suckling. The Apgar score evaluation was performed immediately after birth, 15 and 60 minutes of life. Time intervals were measured in minutes and were carried through the observation of lambs with their dams. Data were analyzed using mean ± SEM.

Results: Mean values of the results of HR were 166 ± 47; 175 ± 33; 178 ± 31; 189 ± 20; 169 ± 28 beats per minute, immediately after birth, 15 and 60 minutes, 24 and 48 hours of life, respectively. For the RR, the values had been 64 ± 27 breaths per minute (bpm) immediately after birth; 72 ± 20 bpm at 15 minutes; 73 ± 17 bpm at 60 minutes; 75 ± 18 bpm at 24 hour; and 85 ± 32 bpm at 48 hours. Mean rectal temperature values were 39.3°C ± 0.5; 38.3°C ± 1.3; 38.2°C ± 1.3; 38.9°C ± 0.4 and 39.3°C ± 0.8 immediately after birth, 15 and 60 minutes, 24 and 48 hours of life, respectively. CRT values remained within the normal range, between one and two seconds for all animals, at all moments of observations. Mucous membrane colors were normal (except for one animal) at all moments. The neonates obtained excellent score in the Apgar scoring system. At birth and 15 minutes, 93.25% of the animals obtained an Apgar score between 7 and 8; however, at 60 minutes, only 18.75% obtained maximum score. When measuring the time intervals between birth and SR position 5.4 ± 1.91 minutes; 19.9 ± 8.2 minutes between SR and standing up and 37.5 ± 14.35 minutes between birth and first suckling.

Conclusions: The vital parameters tended to be normal at 48 hours of life. The Apgar score proved to be an excellent system to evaluate the vitality of lambs, and was more reliable at the first two moments of observations.