SEASONAL ANDROLOGIC PROFILE OF BUCKS INFECTED BY SMALL RUMINANT LENTIVIRUS

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Abstract / Resumo:

Several authors (Paula et al., 2009; Ali Al Ahmad et al., 2008; Andrioli et al., 2006) have reported that bucks and rams present intermittent elimination of Small Ruminant Lentivirus (SRLV) proviral DNA in the semen. Thus the objective of this study was to verify the influence of the climatic season and the disease and describe individually the andrological parameters of bucks naturally infected by the SRLV during the wet and dry seasons in the Northeast of Brazil.The experiment was carried out over twelve months, in the dry, dry-wet season (transition 1), wet and transition wet-dry seasons (transition 2). . The experiment was carried out at EMBRAPA – National Research Center for Goats and Sheep, Brazil. The bucks from the Saanen breed (n=2) and the Anglo Nubian breed (n=4) were 3-4 years old with 53.13kg mean weight. They were proven to be naturally infected by SRLV after at least two IDGA tests and Nested-PCR tests. The semen of the animals was examined weekly and the external genitalia (penis, prepuce and scrotum) were inspected every fifteen days by testis and epididymis palpation to assess the consistency, symmetry, position and presence of painful sensitivity. The scrotum circumference was measured as indicated by the CBRA (1998) and a paquimeter was used to measure the length and width of both testis to calculate the testis volume, using the spheroid prolate formula (Bailey et al. 1998). The semen was collected with an artificial vagina (Mies Filho, 1962). After collecting and determination of the ejaculate volume (mL) the semen was sent to the laboratory and assessed following the CBRA criteria (1998). During the assessment period, alterations were observed in the andrological examination in all the males, but these alterations did not damage the animals´ andrological performance. In spite of the alteration, the reproducer presented 72.86 +- 16.84% mean motility (+- ep) and 3.07 +- 0.83 mean vigor (+- ep) during the referred period. All the infected bucks were able to respond to semen collection at some time during the experiment. However, at some moment it was not possible to collect semen. Individual variation was observed for all the morphological parameters, except in transition period 1 for the minor defects and percentage of normal cells. In the present study, the climatic season did not affect all the bucks in the same way, probably because of a greater resistance to caloric stress naturally presented by some animals or because of interference from the viral pathology. In conclusion, bucks naturally infected by the Small Ruminant Lentivirus present normal reproductive characteristics and could be used in assisted reproduction programs but need periodic care from a veterinary to maintain their health and welfare.