hCG administration in Saanem goats inseminated following synchronized estrus

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The objective of this study was to evaluate the effect of intravaginal hCG administration on pregnancy rate in artificially inseminated Saanen goats after induction of synchronous estrus. A total of 73 goats (35 nuliparous and 39 pluriparous) received intra-vaginal sponges (60 mg MAP; Progespon®, Syntex, Buenos Aires, Argentina) for 6 days plus 30µg d-cloprostenol (Prolise®; ARSA S.R.L., Buenos Aires, Argentina) latero-vulvar and 200 IU eCG (Novormon® 5000; Syntex, Buenos Aires, Argentina) i.m. 24 h before sponge removal. Goats were checked for estrus twice daily and only those in estrus 24 to 36 h after sponge removal were artificially inseminated in standing position (Embrapa Artificial Insemination Technique) from 18 to 24 hours after onset of estrus. The remaining goats in estrus were naturally mated. Following artificial insemination, goats were randomly assigned to receive 300 IU hCG (Vetecor® 5000; Hertape Calier, São Paulo, Brazil) (16 Nuliparous and 14 Pluriparous) or no further treatment (Control; 15 Nuliparous and 15 Pluriparous). hCG was diluted in a 0.3 mL saline solution and deposited into the vagina with the aid of a sterile insulin syringe without needle. Qualitative variables were analyzed by Chi-square and the quantitative analysis of variance to check differences between treatments was performed with T-test (5%, SAEG®). Parameters evaluated were similar for both groups (P>0.05). Body condition score (1 to 5 scale) was similar (P>0.05) for hCG treated (3.2±0.3) and control animals (3.4±0.3). Pregnancy rate was checked 90 days after artificial insemination by transretal ultrasonography. The estrus response was 92% (67/73) and 60 goats were artificially inseminated at the interval established. Natural breeding resulted in 57% pregnancy rate (4/7). Pregnancy rate was similar for hCG treated (57%, 17/30) and control goats (43%, 12/30). These promising results support further more comprehensive studies with greater numbers of goats to explore the use of hCG intramuscularly.

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