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The effect of using hCG in recipient goats: Preliminary results

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This study checked the effect of hCG on pregnancy rate of recipient goats. Multiparous acyclic dairy goats (Alpine/Saanen) from second to third parity order (n=40) were subjected to synchronous estrus induction by use of intravaginal sponges (60 mg of medroxyprogesterone acetate; Progespon®, Zoetis, São Paulo, Brazil) for six days plus 200 IU of equine chorionic gonadotropin (eCG; Sincro-eCG 6000®; Ouro Fino, Cravinhos, Brazil) and 131.5 µg of cloprostenol (Sincrocio®, Ouro Fino, Cravinhos, Brazil) i.m. 24 h before sponge removal. Estrus was monitored twice daily with fertile males (D0 = Day of onset of estrus). Goats in estrus were assigned to receive 0.3 mL of saline (G-Control, n=12, body condition scores 3.5 ± 0.1 , 1 to 5 variation - Detweiler *et al.*, Annual Goat Field Day 23:127-130, 2008) or 300 IU human chorionic gonadotropin (hCG, Ferticor®; Hertape- Calier do Brasil Ltda, São Paulo, Brazil) (G-hCG, n=15, body condition scores 3.5 ± 0.1) i.m. at the time of embryo transfer (D7). A total of 10 donor dairy goats (Alpine/Saanen) from second to forth parity order and with body condition score from 3.5 to 4.0 were subjected to superovulation and nonsurgical embryo collection seven days after estrous onset (Fonseca *et al.*, Biopreservation and Biobanking 20:493-501, 2022). Embryos were selected and equally assigned according developmental stage and quality to both groups and non- surgically transferred in pairs to the uterine horn ipsilateral do corpora lutea checked by B- mode and color Doppler transrectal ultrasonography transrectal ultrasonography (Moraes *et al.*, Small Ruminant Research 192:106215, 2020). Pregnancy rates were checked by transrectal ultrasonography 40 days post estrus (33 days after embryo transfer). Statistical analysis was performed using BioEstat 5.3 (Belém, Brazil). Pregnancy rates were compared by Fisher's exact test at 5% minimum level of significance. Overall pregnancy rate was 63.0% (17/27), being 58.3% (7/12) and 66.7% (10/15) for G-Control and G-hCG, respectively ($P > 0.05$). Preliminary results showed an interesting pregnancy rate obtained by non-surgical technique while hCG positive effect remained to be checked in large trials in dairy goats. Financial support: CNPq (4039092021-0 and 303727/2021-7) and FAPEMIG (BPD-00308-22 and APQ-00448-24).