Administration of eCG is not recommended in time-AI protocols for beef cattle in good body condition

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The main objective of this study was to examine the effect of equine chorionic gonadotropin (eCG) administration on pregnancy per AI (P/AI) in Angus and Angus × Avileña cattle subjected to a 7-d ovulation synchronization protocol. On Day 0 (11:00), heifers (n=36, 460 kg, 3.7 BCS, 2.1 years old) and cows (n=256, 594 kg, 2.8 BCS, 4.8 years old) were randomly assigned to one of two intravaginal progesterone (P4) inserts (PRID 1.55 g, Ceva S.A., Spain or CIDR 1.38 g, Zoetis, Spain). On Day 7 (16:00), the P4 insert was removed, 500 µg of dinoprost (Enzaprost, Ceva S.A.) administered im and females were further subdivided to receive or not 500 IU of eCG im (Foligon, Merck Sharp & Dohme Animal Health, S.L., Spain). On Day 10 (11:00), all cattle received 100 µg of GnRH (Cystoreline, Ceva S.A.) and were inseminated by one technician with semen from three sires equally distributed among treatments. Ovarian ultrasonography was done in a subset of 47 cows at Day 0 and in all cattle 35 days after AI to determine cyclicity and pregnancy status, respectively. Data were analysed by Chi-square using FREQ and GLM procedures (SAS v 9.4). Three cows out of 47 cows were acyclic and remained non-pregnant, showing all of them a similar BCS (3.2). The overall P/AI was 51% (149/292). Cattle category, breed, P4 insert type or the inclusion of eCG did not affect P/AI (51 vs 52%, with and without eCG; P=0.890). Sire tended to affect P/AI (46, 45 and 60%; P=0.066). BCS did not differ between cattle that became pregnant or not. In summary, the inclusion of eCG did not affect P/AI, therefore, its use is not recommended in ovulation synchronization protocols for suckler cows and heifers in good body condition score, in order to reduce costs. Funded by Project FITE 2019 VACAFERTILTERUEL, Government of Aragón and FEDER.

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