

Abstracts - 35th Annual Meeting of the Brazilian Embryo Technology Society (SBTE) FTAI/FTET/AI

Efficiency of injectable P4 or EB at the beginning of resynchronization protocol (19 days after TAI) in lactating dairy cow

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Resumo

The aim of this study was to evaluate the use of injectable progesterone (P4i) or estradiol benzoate (EB) to synchronize follicle wave in early resynchronization 19 days after 1st TAI on P/AI and false positive rates (FP) in Bos taurus cattle. In experiment 1, 366 lactating Holstein cows (40.4±0.3 Kg milk/d) from Brazil commercial farms were submitted to TAI (D0). Nineteen days after TAI, cows received an intravaginal P4 device (1g, Sincrogest®, Ourofino, Brazil) and were allocated into two groups: CTL (without treatment, n=184) and P4i (150mg i.m, Sincrogest injetável®, n=182). Seven days after (D26), the P4 device was removed and ultrasound evaluations of luteal vascularization were performed using Color Doppler (M5®, Myndray). Pregnant cows were reevaluated on D33 to confirm pregnancy, while non-pregnant cows were treated with 1mg of estradiol cypionate (SincroCP®), 0,530g PGF-2« (Sincrocio®) on D26. At the same time, the dominant follicle (DF) was measured. The 2nd TAI was performed on D28, and the pregnancy was performed 32d after 2nd AI. In experiment 2, 234 Holstein lactating cows (40.6±0.2 Kg milk/d) were previously synchronized in the same way as Exp. 1 but were allocated into two groups: CTL (without treatment, n=117) or EB (EB 1mg, Sincrodiol®, n=117). The evaluations and subsequent treatments were the same as described in Exp. 1. Statistical analyses were performed by SAS Glimmix procedure (v9.4). In Exp. 1, there was no difference between groups for P/AI at 26d [CTL=51.1% (94/184) vs. P4i=52.8% (96/182); P=0.73)], FP [(CTL=31.9% (30/94) vs. P4i=32.3% (31/96); P=0.71)] and P/AI at 33d [(CTL=34.8% (64/184) vs. P4i=35.7% (65/182); P=0.64)]. Also, the DF in non-pregnant cows [(CTL=18.2mm vs. P4i=19.1mm; P=0.19)] and P/AI at the 2nd TAI [(CTL=32.0% (29/89) vs. P4i=30.2% (26/86); P=0.79)] was similar between groups. In Exp. 2, similar P/AI at 26d [(CTL=46.0% (44/117) vs. EB=49.6% (58/117); P=0.60)], FP [(CTL=26.0% (14/54) vs. EB=37.9% (22/58); P=0.17)] and P/AI at 33d [(CTL=34.2% (40/117) vs. EB=30.8% (36/117); P=0.58)] were observed between groups. Also, the DF in non-pregnant cows (CTL=20.4mm vs. EB=19.1mm; P=0.28) and P/AI at 2nd TAI [(CTL=31.7% (20/63) vs. EB=37.3% (22/59); P=0.52)] was similar between the groups. In conclusion, treatment with P4i or EB in the early resynchronization protocol did not affect the P/AI of 1st TAI at 26d and 33d, nor DF diameter at P4 device removal and nor the P/AI at 2nd TAI.