

EFFECT OF TREATMENT WITH eCG ON CONCEPTION RATE IN NELORE COWS WITH DIFFERENT BODY CONDITION SCORES SUBMITTED TO FIXED-TIME ARTIFICIAL INSEMINATION (RETROSPECTIVE ANALYSIS)

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The aim of this study was to evaluate the effect of eCG treatment at the time of intravaginal progesterone device removal on conception rate in lactating Nelore cows with different body condition scores (BCS) submitted to fixed-time artificial insemination (FTAI). Previous studies suggested that the eCG treatment improve the conception rate in anestrus cows (Baruselli et al., *Theriogenology*, v. 59, p. 214, 2003). This study analyzed 1984 FTAI in Nelore cows (data of five experiments) kept under pasture regimen at São Paulo and Mato Grosso do Sul states. On Day 0 (beginning of hormonal protocol), BCS (5-point scale, 1 thin and 5 fat) was evaluated. At time of device withdrawal, half of animals received 400 IU eCG i.m.. Cows were artificially inseminated 54 hours later. The pregnancy diagnosis was performed by ultrasonography 30 days after FTAI. No interactions were found between the treatments (eCG or no eCG), experimental replicates and BCS. An interaction between eCG treatment and BCS was observed for conception rates. Conception rates were compared by Chi-square test. The eCG treatment increased pregnancy rate only in cows with low BCS [BCS 2.0, no eCG=22.7% (5/22)^a and eCG=47.6% (20/42)^b, P=0.02; BCS 2.5, no eCG=42.8% (83/194)^a and eCG=56.9% (124/218)^b, P=0.01; ECC 3.0, no eCG=53.9% (253/469)^a and eCG=58.4% (261/447)^b, P=0.08; ECC 3.5, no eCG=52.1% (136/261) and eCG=51.7% (123/238), P=0.46; ECC > 4.0, no eCG=69.6% (32/46) and eCG=63.8% (30/47), P=0.28]. The results suggest that the eCG treatment at time of intravaginal progesterone device removal improves conception rates in cows with poor BCS ($\leq 3,0$) submitted to fixed-time artificial insemination. The positive effect of eCG treatment in cows with low BCS can be associated with higher frequency of anestrus observed in this animal class. In conclusion, the response of the eCG was dependent on the BCS at beginning of the fixed-time artificial insemination protocols.