EFFICIENCY OF DIFFERENTS PROTOCOLS FOR ESTRUS SYNCHRONIZATION IN BOVINE EMBRYO RECIPIENTS

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The aim of this trial was to verify the efficacy of 3 different estrus synchronization protocols for embryo recipients preparation. Five hundred and twenty four *Bos taurus x Bos indicus* heifers were treated. In the first group (G-PGF) 100 heifers received 150 µg cloprostenol IM (Prolise, Tecnopec, Brasil) after previous examination by transrectal ultra-sonography (Aloka SSD 500, 5 MHz) to CL identification. Estrus detection was observed after 72 hours. The animals were examined again by transrectal ultra-sonography seven days after estrus behavior for CL identification. The results showed 63.8% (115/180) of efficiency. The second group, 105 heifers (G-P4) received 1,9g implant of intravaginal progesterone and 2 mg estradiol benzoate IM, in random stages from estrus cycle. On eight day the implants were removed and the animals received an IM of 150 µg cloprostenol (Prolise, Tecnopec, Brasil). After 24h all the animals received 1 mg BE IM. Eighteen days after start of treatment a new examination by transrectal ultra-sonography for CL identification was performed, without previous estrus detection. The dates showed 80.9% (85/105) of efficiency. In the third group (G-P4+eCG), 239 heifers received similar treatment of G-P4, with early administration of 150 µg cloprostenol at fifth day plus a 400 UI of eCG (Folligon, Intervet, Brasil) with 71.9% (172/239) of efficiency. The conception rates were not evaluated because the embryos were obtained from different methods. The treatment protocols with PGF needs estrus observation and there are a great variation between PGF administration and its response. Furthermore it is necessary the CL identification by rectal palpation or ultrasonography evaluation at the beginning of treatment. In contrast with the PGF treatment, the P4 and BE with or without eCG can be made independent on estrus cycle phase. Another advantage of this protocol is that is not necessary estrus observation, making easier the recipient management. The results obtained in this study show that the protocols with P4 + BE are good protocols to prepare embryo recipients.