EFFECT OF FOLLICULAR CODOMINANCE AT THE TIME OF FOLLICULAR ASPIRATION ON THE RECOVERY AND IN VITRO COMPETENCE OF OOCYTES IN *Bos indicus* CATTLE

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Two hundred thirty two rounds of follicular aspirations (ovum pick up - OPU) were performed in 10 Gir (*Bos indicus*) cows. At the time of each round of OPU (once a week), with the use of an ultrasound (Scanner 200s) equipped with a setorial intravaginal probe of 7,5 MHz, the follicles in the ovary, and the diameter (Ø) of the two biggest follicles were evaluated. Then, all follicles with Ø $\geq$ 3mm were aspirated and the oocytes were morphologically evaluated, maturated for 24 hours in TCM-199 media + 10% of estrus-cow serum and FSH, for 24 hours at 38°C, with 5% of CO_2 and 95% of humidity. The maturated oocytes were fertilized by sperm cells that were selected by the swim up procedure. Twenty two hours after fecundation in FERT-TALP media + 10 µL/mL of heparin, with a inseminating dose of 2,0 x 10^6 sptz/mL, the possible zygotes were cultivated with granulosa cells in CR_{2aa} media + 10% of BFS. In the statistical analyzes, codominance was defined as the presence of two or more follicles with Ø > 9mm in one or both ovaries of a donor cow. The OPU rounds were divided in two groups: With/COD vs. Without/COD. The residue distribution was analyzed and data transformation was performed in non-normal distributions. Variables were analyzed with ANOVA and Chi-Square test. Conclusions were made based in a significance level of 5%. Out of 232 aspirations, 2195 oocytes were collected (9.6±0.4 oocytes/cow/round). There was no interaction between follicular codominance and OPU round. The number of OPU rounds (n) corresponding to the With/COD and Without/COD groups was, respectively, 61 and 161. Among the studied variables, the observed responses for the With/COD and. Without/COD groups were, respectively: Follicular pool (17.2±1.0^b vs. 19.5±0.7^a); Follicles < 6mm (14.6±1.0^b vs. 18.1±0.7^a); Follicles with 6 to 9mm (0.4±0.1 vs. 0.5±0.0); follicles > 9mm (2.2±0.1^a vs. 0.9±0.4^b); Ø of the biggest follicle (16.1±0.5^a vs. 11.2±0.2^b); Ø 2nd biggest follicle (13.2±0.8^a vs. 5.4±0.2^b); recovered oocytes (7.9±0.7^b vs. 10.2±0.6^a); recovery rate [477/1047 (45.5%)^b vs. 1718/3339 (51.4%)^a]; Grade1 oocytes [74/477 (15.5%)^b vs. 341/1718 (19.84)^a]; Viable oocytes [278/477 (58.3%) vs. 1040/1718 (60.5%)]; Cleavage rate [128/171 (74.8%) vs. 531/762 (69.7%)], and Blastocyst forming rate [34/128 (26.5%) vs. 155/579 (26.8%)]. These results demonstrate that codominance of follicles at the time of the follicular aspiration decrease the number of visualized follicles as well as the number of oocytes recovered, which in turn decrease the final number of embryos produced per donor/collection.

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