

SUMMARY

Aim of the study complete technical sufficiency to work about ovum pick-up method for producing in vitro cattle embryos.

TCM-199 + 10% Fetal Calf Serum (FCS) + 2 μ g/ml FSH and 20 or 22 hours incubation period was used for in vitro maturation. Direct washing method with Brackett and Oliphant (BO) medium and 5 or 6 hours incubation period was used for in vitro fertilization and Charles Rosencrans (CR1aa) medium was used for in vitro embryo culture. Oocytes incubation was done in 39⁰C, 5% CO₂ and over 95% humidity all IVM, IVF and IVC procedures.

230 ovaries were collected after 12 visited to slaughterhouse. 1661 A and B quality oocytes and 498 C quality and degenerated oocytes were aspirated and mincing from the ovaries. 7.22 A and B quality oocytes and 2.17 C quality and degenerated oocytes totally 9.39 oocytes provided from per ovaries. Only A and B quality cow oocytes were used for production of in vitro embryos.

Maturation rate was 0.92 \pm 0.021, klivaj rate was 0.72 \pm 0.055 and coming into morulae-blastocyst stage rate was 0.34 \pm 0.047. Killed spermatozoa were used to diagnosis of the parthenogenetical klivaj rate. Parthenogenetic klivaj rate was 4.5% after taken some oocytes sample randomly. In vitro produced embryos from this study were transferred to six (6) recipients. Two (2-33,3%) pregnancy were diagnosed by ultrasound imaging in 50th day after the transfer.

As a result in vitro fertilization laboratory was start of working sistematically for in vitro cattle embryo production. In vitro embryo production is more economic according to collected embryos by superovulation. An important step was overcome for in vitro embryo production.