

9th Yazd International Congress and Student Award on Reproductive Medicine with 4th Congress of Reproductive Genetics

Poster Presentations

P-116

Natural cycle versus modified natural cycle for endometrial preparation in women undergoing frozen-thawed embryo transfer: A randomized clinical trial

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Background: There are three main types of cycle regimens using for endometrial preparation: natural cycle, ovulation induction cycle, and artificial cycle. The natural cycle can be used only in normoovulatory women. Regarding the advantages and disadvantages of each method, various studies have been performed, but the optimal frozen-thawed embryo transfer (FET) cycle strategy in terms of the in vitro fertilization outcomes (clinical pregnancy rate, ongoing pregnancy

rate, and live-birth rate) is still debated.

Objective: To compare the natural cycle versus modified natural cycle for endometrial preparation in women undergoing FET.

Materials and Methods: In this randomized clinical trial, a total of 110 infertile women undergoing FET, at Arash Women's Hospital, were included and randomly allocated into two groups: the true natural FET (tNFET) cycle with spontaneous luteinizing hormone surge and the modified natural FET (mNFET) who received 5000 IU hCG injection 36 hr before ET. The outcome measures were: patients' characteristics, implantation rate, chemical and clinical pregnancy, ongoing pregnancy and abortion rate.

Results: There were no differences in patients' baseline characteristics between implantation rate in the two groups. There was no difference in terms of the chemical pregnancy, clinical pregnancy, and abortion rate, while the implantation rate was significantly higher in the mNFET group (29.2 % versus 17.6 %; $p = 0.036$).

Conclusion: Our results demonstrated that both types of natural cycles are similar in terms of pregnancy outcomes, while the modified cycle may be associated with a higher implantation rate.

Key words: Embryo transfer, Embryo Implantation, Human chorionic gonadotropin.