

**EFFECT OF SINGLE DOSE GNRH AGONIST AS LUTEAL SUPPORT ON PREGNANCY OUTCOME IN FROZEN-THAWED CYCLES KETEVAN KANTARIA M.D, NATALIA KHONELIDZE M.D.,PH.D, GIA TSAGAREISHVILI M.D.,PH.D.**

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Background:Luteal phase support is essential to enhance the reproductive outcome in IVF cycles. In addition to progesterone and HCG, several studies have described the benefit of administration of GnRH agonists as luteal phase support by inducing LH secretion by the pituitary cells or stimulating the endometrium GnRH receptors to improve implantation, pregnancy and live birth rates, whereas other studies showed dissimilar conclusions both in fresh and FET cycles. Objective:To determine whether an additional GnRH agonist bolus administered at the time of implantation for luteal phase support in donor-recipient frozen-thawed embryo transfer (FET) cycles improves clinical pregnancy in patients with previous failed FET cycle. Materials and Methods:This is a prospective cohort study in 12 infertile patients aged 38-45, who had one failed FET transfer with good quality day 3 donor embryos. All of them received daily 17  $\beta$  estradiol 6-10 mg daily, mean thickness of endometium on the day of progesteron initiation varied from 8 to 9,4 mm, one injection of triptorelin 0,1 mg was injected on the 6th day following the progesteron introduction. All of them underwent blastocyst transfer ,embryo quality was comparable. Primary outcome measure was clinical pregnancy rate.Results:A total of 12 FET cycles were analyzed. Seven out of 12 patients ( 58, 3 %) had positive blood test after 10 days of transfer and confirmed heart beat on 6th week of gestation. Administration of a subcutaneous GnRH agonist at the time of implantation may be promising in patients with failed FET cycles. To confirm statistical significance of method more large randomized trials are needed.Key Words: Frozen, Embryo transfer, GnRH agonist, Luteal phaseClinic for IVF and Reproductive Health " IN VITRO", Tbilisi, GeorgiaE-mail: kate\_kantaria@yahoo.com Mob. +995577737474