

## **Human Oocytes Cryopreservation by Slow Freezing Technique – A Case Report.**

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- Objective:** To describe the successful use of oocyte cryopreservation in an IVF cycle.
- Design:** Case report.
- Setting:** Private ART Clinic.
- Patient:** A 30 year-old patient with tubal and oligoasthenoteratospermia underwent controlled ovarian hyperstimulation and IVF-ET in February 2003. Total 8 oocytes were collected. Three MII oocytes were ICSI and 5 (4 MII, 1 MI) were cryopreserved per couple requested. She became pregnant, and delivered a baby girl in November 2003. The patient returned 3 years later for a frozen cycle. Cryopreserved oocytes were thawed, inseminated via ICSI, and cultured. To synchronize the recipient's endometrium, the patient was given estradiol replacement and when the endometrium reached > 8mm thickness, progesterone in oil was started. Embryo transfer was performed on day four of progesterone.
- Intervention:** An IVF cycle resulting in frozen oocytes per patient request using slow freezing method with 3 steps dehydration protocol of 1, 2 – propanediol and sucrose.
- Result:** The patient's initial serum  $\beta$ -hCG level was 236 mIU/ml 14 days after ET. An initial ultrasound at the sixth week of gestation revealed one gestational sac with positive cardiac motion and appropriate sized yolk sac. The pregnancy was uneventful and culminated in a cesarean delivery of a healthy baby girl.
- Conclusion(s)** This case illustrates the feasibility of oocyte cryopreservation resulting in a normal pregnancy and healthy baby. Patients undergoing IVF have options of freezing either embryos or oocytes decreases the stress of the ethical dilemma that many couples go through when they make decisions concerning the fate of their embryos and surplus oocytes.