

## **A Successful Outcome Using Frozen Oocytes from an Egg Bank – A Case Report.**

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### **Objective:**

To describe the successful use of cryopreserved oocytes from an egg bank.

### **Design:**

Case report.

### **Setting:**

Private ART center.

### **Patients:**

A 42 year-old patient with secondary infertility was treated for diminished ovarian reserve and oligospermia. She underwent 3 unsuccessful *in vitro* fertilization cycles with PGD for advanced maternal age. The couple was counseled about undergoing IVF, using fresh versus frozen donor eggs from our frozen oocyte bank. The couple decided to attempt pregnancy using frozen eggs from the West Coast Fertility Centers Egg Bank.

### **Materials and Methods:**

After giving informed consent, oocyte donors underwent controlled ovarian hyperstimulation for ultrasound guided oocyte retrieval. All metaphase II oocytes were cryopreserved using a modified 3 step slow freeze dehydration protocol of 1, 2 – propanediol with sucrose. 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.

### **Result:**

The patient's initial serum  $\beta$ -hCG level was 567 mIU/ml 14 days after ET. An initial ultrasound at the sixth week of gestation revealed two gestational sacs with positive cardiac motion and appropriate sized yolk sacs. The patient is now 26 weeks pregnant.

### **Conclusion**

This case illustrates the feasibility of oocyte cryopreservation resulting in a normal pregnancy.

We observed that there was good survivability, fertilization and cleavage of the oocytes after the freeze-thaw process.

Recipient patients can now avoid the difficulties arising from conflicts in scheduling the egg donor's availability with the recipient's cycle, or the possibility of the egg donor's non-compliance with medical instructions thereby jeopardizing the cycle outcome. Furthermore, the recipient can minimize the legal fees involved in preparing the donor's contract prior to starting a fresh donor egg cycle. For most patients who elect to use a frozen egg bank, the cycle can be initiated without months of waiting.

Currently, we are conducting an IRB approved study to compare the embryo quality between freshly oocytes and frozen-thawed oocytes. The results of further research focusing on the outcome of oocyte cryopreservation can potentially make this a viable choice for patients.