American Society for Reproductive Medicine 2014 Annual Meeting
October 18 to 22, 2014 ● Honolulu, Hawaii

Title:

WOMEN PURSUING OOCYTE CRYOPRESERVATION FOR NON MEDICAL PURPOSES ARE MORE LIKELY TO ACHIEVE 10 OOCYTES IF THEIR FSH IS <11, REGARDLESS OF AGE

Authors:
Lisa Schuman, LCSW1, Keri Bergin, BS1, Georgia Witkin, PhD1,2, Joseph A Lee, BA1 and Alan B. Copperman, MD1,2

Affiliations:
1. Reproductive Medicine Associates of New York, 635 Madison Ave 10th Floor New York, New York, United States, 10022

2. Obstetrics, Gynecology and Reproductive Science, Icahn School of Medicine at Mount Sinai, Klingenstein Pavilion 1176 Fifth Avenue 9th Floor New York, New York, United States, 10029.

Objective:
Women pursuing elective oocyte cryopreservation (EOC) hope to achieve an immediate favorable outcome to foster future goals of family building. A retrieval of ≥10 oocytes at vaginal oocyte retrieval (VOR) has been associated with ultimately achieving fertilization, implantation, and positive pregnancy. In order to prospectively identify realistic expectations, our study sought to evaluate baseline FSH level as a marker for achieving ≥10 oocytes at VOR.

Design:
Retrospective analysis

Materials and Methods:
EOC patients from 5/7/2005-3/26/2014 were included. Patient age and FSH were segregated and matched to oocyte counts at VOR. Mean oocyte counts were correlated with FSH levels to evaluate the number of cycles needed to achieve ≥10 oocyte outcome. Statistical analysis was conducted by ANOVA with significance set at $p<0.05$.

Results:
Increasing baseline FSH levels correlated with decreasing oocyte counts among all age groups, and stabilizing at the lowest counts at FSH level >13. Patients ≥38 oocyte counts were significantly less when compared to <35 and 35-37 subsets ($p<0.05$). Patients, regardless of age, required 1 cycle to attain ≥10 oocytes only if they reached an FSH level of <11.

Conclusions:
EOC can be a physically, emotionally, and financially exhausting process, and patients should prospectively be provided with prognostic information. We demonstrated that patients who presented with a baseline FSH value of <11 mIU/mL and were <38 years of age at the time of retrieval had 77.8%

chance of having ≥10 oocytes retrieved at VOR. Our data is reliable in offering realistic expectations to EOC patients; future research of these patients' thaw-survival, fertilization rates and pregnancy outcomes will allow us to further formulate EOC cycle prognosticators.

Support:
None.

Table:

Baseline FSH Levels for EOC Patients					
FSH	<35 (n=98)	35-37 (n=229)	38-40 (n=289)	>40 (n=81)	p-value (FSH)
<5	22.5±12.8 (n=23)	18.3±8.2 (n=6)	17.2±8.8 (n=19)	18.0±8.0 (n=3)	N/A
5-8	16.8±9.1 (n=44)	16.3±8.6 (n=123)	17.1±11.6 (n=114)	10.7±6.4 (n=19)	<0.05
8-11	12.4±8.1 (n=18)	13.5±6.9 (n=59)	10.8±5.5 (n=86)	10.3±7.6 (n=29)	<0.05
11-13	9.3±8.7 (n=3)	12.4±9.9 (n=18)	9.9±6.6 (n=22)	6.4±3.2 (n=13)	<0.05
>13	7.1±4.8 (n=10)	7.7±3.5 (n=23)	7.6±4.8 (n=48)	6.5±3.4 (n=18)	<0.05
p-value (AGE)	N/A	0.28	<0.05	<0.05	