

ACCUMULATION OF VITRIFIED OOCYTES EQUATES THE CLINICAL RESULTS IN LOW-RESPONDER PGS PATIENTS WHEN THE NUMBER OF COLLECTED OOCYTES APPROACHES THE ONE IN NORMO-RESPONDER PGS PATIENTS

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Abstract Body

Introduction

The aim of this retrospective observational study was to evaluate the efficacy of our PGS program in low responder patients after repeated ovarian stimulation cycles with cumulative vitrification of MII oocytes in combination with a fresh cycle.

Methods

A total of 98 mixed cycles and 1199 oocytes (669 fresh and 530 vitrified) from our PGS program have been included in this study, in which at least one MII oocyte was vitrified and added to a subsequent fresh PGS cycle. Mean female age was 40.7 (SD:2.7). Biopsies were performed on D3. For aneuploidy screening, array-CGH was employed. Chromosomally normal embryos were transferred on D5.

Results

(p<0.05)

	Mixed oocyte cycles	Fresh oocytes	Vitrified oocytes	p-value
No. of oocyte (retrieval/vitrified)	1199	669	530	
No. of MII oocytes microinjected	970	540	430	
Fertilization rate	70.1%	70.2%	72.3%	NS
Mean Blastomere No. D3 biopsied embryos (SD)	7.6 (1.5)	7.7 (4.5)	7.6 (1.4)	NS
Fragmentation degree D3 biopsied embryos (SD)	7.0 (6.5)	6.8 (6.3)	7.3 (6.8)	NS
%biopsied embryos/fertilized oocytes	71.7	76.2	66.2	0.0039
%D5 blastocyst rate/biopsied embryos	59.0	58.8	59.2	NS
Aneuploidy rate	81.4	84.6	77.0	0.0344
Efficiency rate: normal D5 blastocyst/MI	8.0	7.6	8.6	NS

Overall pregnancy rate per transfer was 49.0%, implantation and miscarriage rates were 43.3% and 8%.

Conclusion

Accumulation of vitrified oocytes equates the clinical results in low-responder PGS patients when the number of collected oocytes approaches the one in normo-responder PGS patients. This strategy could also reduce costs to patients and the degree of drop off.