THE ACCUMULATION OF VITRIFIED OOCYTES IS NOT A GOOD STRATEGY TO INCREASE THE NUMBER OF EUPLOID AVAILABLE BLASTOCYSTS AFTER PREIMPLANTATION GENETIC SCREENING IN PATIENTS WITH LOW OVARIAN RESERVE.

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Abstract Body

OBJETIVE: To evaluate the strategy of vitrified oocytes accumulation in a preimplantation genetic testing for aneuploidy (PGT-A) program.

DESIGN: Retrospective study.

MATERIALS AND METHODS: 58 patients with low ovarian reserve underwent PGT-A for repeated implantation failure or recurrent pregnancy loss indication were included. All oocytes from accumulative cycles were cryopreserved using standardized method. Embryo biopsy were carried out in blastocyst state, with posterior PGT-A. Euploid embryos was transferred to maternal uterus in frozen embryo transfer. Relation between oocyte state before ICSI, number of blastocyst, and number of euploid embryos were calculated.
RESULTS: Patients average age was 39.7 years (± 2.89 years).A total of 895 oocytes were analyzed.Oocytes were classified into two groups, fresh or vitrified. 501 oocytes were analyzed in fresh oocyte group (56%), and 394 (44%) in vitrified group.The media of cycles per patient was 1.34 The survival rate was 78.17%.
A total of 165 embryos got blastocyst stage. Blastocyst rate in fresh group was 21.98% (110 blastocyst) and 17.85% vitrified group (55 blastocyst) ($p<0.05$). Efficiency in frozen oocyte, defined as the blastocyst development rate per devitrified MII oocyte was 13.95% . On the other hand, the euploidy rates were comparable in blastocysts obtained from micro-injected fresh oocytes and vitrified oocytes (34.54% and 30.90%. $p > 0.05$).
A total of 39 euploid embryos was transferred, 29 from fresh cohort and 10 from frozen cohort; getting an implantation media rate of 63.2%. %. 4 cases of miscarriage (11.76%) were reported; 3 corresponded to biochemical and 1 to clinical miscarriage.

CONCLUSION: According to this data, oocyte vitrification decreases the amount of available blastocysts for biopsy in two ways, reducing the number of injectable MII oocytes and reducing the probability to reach the blastocyst state. Once the blastocyst state is achieved, the chromosome content is not affected by oocyte origin.This information may help to decrease treatment costs and invested time for many patients submitted to assisted reproductive.