EMBRYO CRYOPRESERVATION AS AN INSTRUMENT TO PREVENT SEVERE OHSS: THE EXPERIENCE AT AN ART CLINIC IN BRAZIL

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INTRODUCTION: ovarian hyperstimulation syndrome (OHSS) is a life-threatening condition. Since treatment remains empirical, prevention is the most important aspect in its management. Several procedures can be adopted to limit the occurrence of this complication, including embryo cryopreservation.

OBJECTIVE: the aim of this study was to evaluate the impact of embryo cryopreservation in patients at risk of severe OHSS.

METHODS: retrospective study of 491 in vitro cycles performed from January 2008 through July 2009.

RESULTS: in 25 cycles (5, 1%) embryo cryopreservation was performed due to severe OHSS risk. Patients were classified at risk when they presented more than 20 follicles > 12 mm (by ultrasound) or serum estradiol levels higher than 3000 pg/ml. There was no statistical difference in age, cause of infertility or stimulation protocol between groups. The mean of oocyte retrieval in the group at risk for OHSS was 21 and in the control group was 10.9 (p<0.001). In the study group, embryo transfer was not performed and all embryos were frozen; after oocyte retrieval, 15 patients presented no symptoms of OHSS, 6 presented mild symptoms (abdominal discomfort and pain). Four patients presented intense abdominal pain; two of them were submitted to vaginal pouch punction and one was hospitalized due to pain and ascitis. After patients recovering, 35 frozen-tawned embryo transfers were performed; 18 of these resulted viable pregnancies (51, 4%).

CONCLUSION: Our study supports that embryo cryopreservation is a valid instrument in the prevention of severe OHSS. Embryo transfer performed after cryopreservation resulted in acceptable pregnancy rates.