OOCYTE AND BLASTOCYST CRYOPRESERVATION FOR FERTILITY PRESERVATION WITH A SAFE, EASY AND SUCCESSFUL VITRIFICATION TECHNIQUE

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Abstract

Background: The demand of fertility preservation has been increasing since the last 15 years, due to either health conditions or maternity delay. For this reason, many techniques for preservation of oocytes and embryos have been developed along these years. Despite the variety of techniques, many of them require very skilled manipulation and complicated protocol; besides, none of them had reached a high survival rate that would consider the fragility of the oocytes of cancer patients or women over 40 years old. In 2012, an extremely effective and safe noninvasive vitrification method was developed, known as the Cryotec Method.

Objective: The aim of this work is to present the results of the most successful vitrification method for all the developmental stages of oocytes and embryos in clinics of Asian countries.

Materials and methods: In this retrospective study, patients undergoing IVF cycles during 2015-2016 underwent IVF cycles with either oocyte or blastocyst vitrification. A total of 1,271 oocytes and 716 blastocysts were used from patients of average age 34.4 years old from four Asian countries.

Results: The survival rate for vitrified oocytes was 97% (p=0.368), and for blastocysts 100% (p=1.000). The clinical pregnancy rate for both vitrified oocytes and blastocyst groups was 49% and 51% respectively (p=0.368 in both cases) compared to 41% pregnancy in fresh cycles.

Conclusion: This vitrification method shows the best survival rates for oocytes and blastocysts yielding to a higher pregnancy rate compared to fresh cycles. This results are an evidence of the safety and effectiveness of the method. With this high survival rate and excellent clinical results, ordinary methods of advanced fertility facilities in the world are changing.