

## Higher rates of blastocysts in egg donation cycles using the Geri time lapse incubator

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**Introduction & Aim:** Incubators with a time-lapse system are gaining ground on traditional incubators, especially in cycles of blastocysts culture. The objective of this study is to analyze if the number of blastocysts of good quality is higher in egg donation cycles using the Geri incubator compared to the traditional incubators.

**Material & Methods:** We analyzed 389 consecutive egg donation cycles with blastocyst culture from June 2016 to December 2017. In 156 cycles Geri time lapse incubator was used and in 233 a traditional incubator (MINC benchtop). Cycles with partner and donor semen were included, excluding testicular biopsy and PGD. The use or non-use of Geri time lapse incubator was valued as the main independent variable. As confusion variables: Age of the patient, REM, semen of the couple or the donor, number of cycles and number of embryos. As dependent variables, we analyzed the good quality blastocyst formation rate (number of blastocysts to transfer or vitrify per embryos on day 3 by T Student's and with a multivariate linear regression model.

**Results:** Cycles with Geri showed a higher rate of useful blastocysts, since 48.27% of the embryos reached a useful blastocyst for the transfer or vitrification, which was only reached in 39.68% of the embryos developed without Geri. (Student T F:2.307,  $p < 0.001$ ). Appreciated in a multivariate regression model, the Geri culture was the only variable that showed an influence on the rate of useful blastocyst formation independent of the rest of the variables analyzed.

**Conclusion:** The use of Geri in egg donation cycles with blastocyst culture has a higher rate of good quality blastocysts available.

### Biography

Najib Dagher has obtained his MD degree from Odessa State Medical University where he also completed his Residency in Obstetrics and Gynecology. He has obtained in July 2018 a University Diploma in Infertility, Assisted Reproduction Technology (ART) and Endocrinology of the Reproduction at Foch Hospital IVF Center by the University of "Versailles Saint Quentin en Yvelines" in Paris, France. He is currently a Member of "Clinica Tambre" in Madrid, Spain, as well as "IVF Lebanon" in Beirut.

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