Previous donor fertility as prognostic factor in oocyte donation cycles outcome

Jaime Guerrero, Jorge Ten, Joaquín Llácer, Juan Giménez, Rafael Bernabeu

Instituto Bernabeu, Alicante, Spain

Introduction

The success of oocyte donation is reportedly influenced by multiple factors. The effect of previous fertility of donors in recipients outcomes is controversial. This study was designed in an attempt to elucidate if fertility potential is affected when consider donors with own pregnancies or pregnancies obtained in previous donations.

Methods

Retrospective study including all oocyte donation cycles performed in Instituto Bernabeu from January to June 2013. Four groups were established according on the fertile status of the donor. Group 1, donors with no proven fertility (53); group 2, donors having achieved a pregnancy on her own (40); group 3, donors with previous treatments resulting on clinical pregnancy of the recipient (73); group 4, donors accomplishing both, own fertility and fertility in previous treatments (140). Statistical analysis was performed by analysis of variance (ANOVA) for continuous variables and chi-square test for categorical parameters.

Results

86.7% of donors showed prior fertility. There were no differences between groups in any factor that could influence IVF success (donor and recipient age, number of donated eggs, number of transferred embryos…). Our cohort had an overall clinical pregnancy rate of 50.3 % and a miscarriage rate of 13.1%. Pregnancy rates were also calculated for each group: group 1, 45.1%, group 2, 52.6%, group 3, 50%, group 4, 51.9%, non-significant differences were observed (p= 0.97).

Discussion / Conclusion

The lack of proven fertility of donors was associated with slightly impaired outcomes, while comparable pregnancy rates were noted in donors with a history of previous spontaneous pregnancy or treatments in which recipients conceived using her eggs. These data should be considered when we match donors and recipients.