

DAY 4 VERSUS DAY 5 EMBRYO TRANSFER IN AN EGG DONATION PROGRAM

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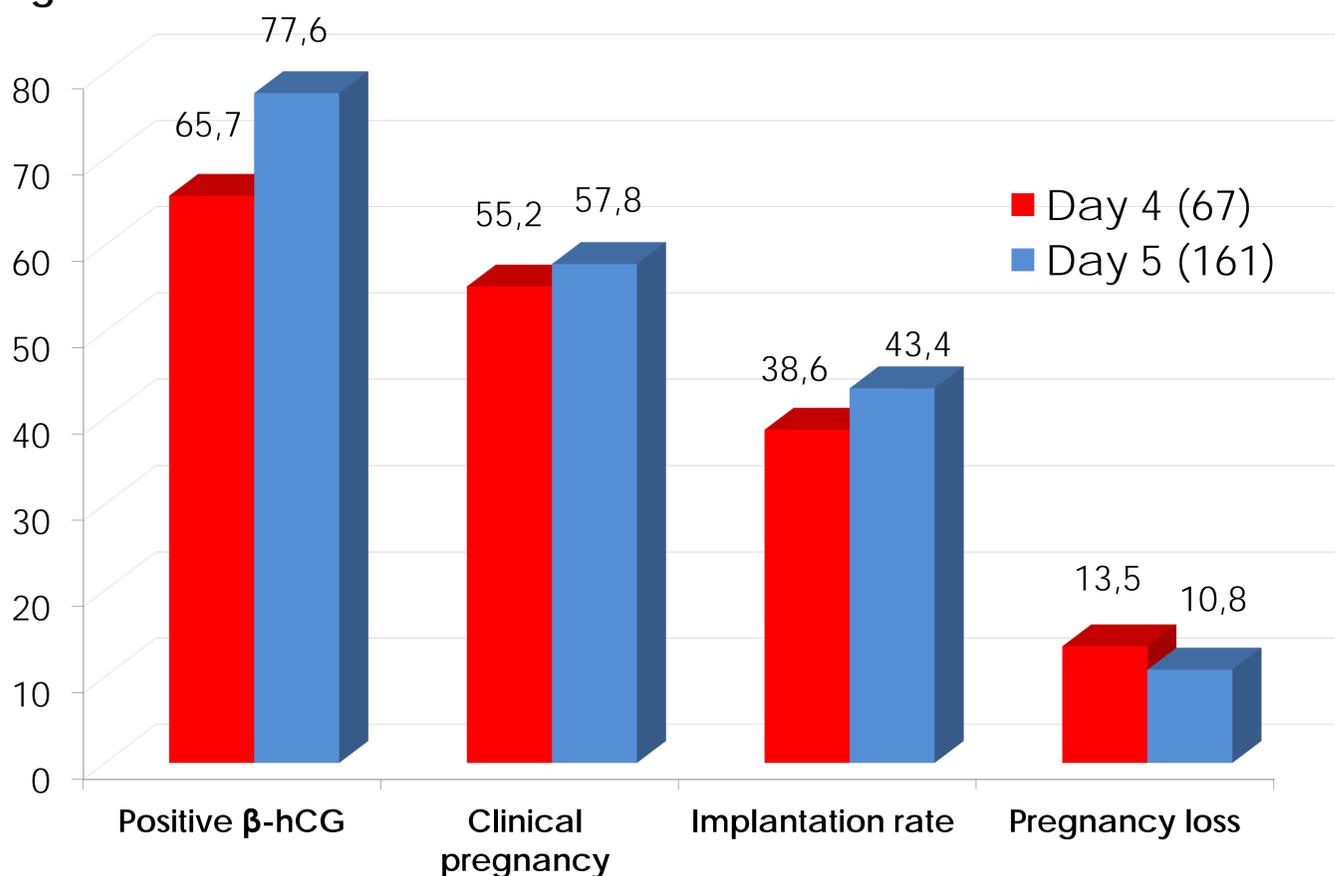
Introduction

Traditionally, the vast majority of embryo transfers are performed either at cell stage or blastocyst stage, while transfer on day 4 remains an option that is practically overlooked. Few reports exist evaluating the effectiveness of day 4 embryo transfers. The main goal of this study was to analyze whether day 4 embryo transfer is as effective as day 5 in embryo selection capability in order to achieve pregnancy.

Results

There were no differences in terms of maternal and donor age ($41,1 \pm 4,4$ and $24,9 \pm 3,9$ versus $41,9 \pm 4,4$ and $24,1 \pm 3,8$), endometrial thickness ($8,6 \pm 1,8$ versus $8,6 \pm 1,5$), follicular phase length ($19,0 \pm 3,6$ versus $19,5 \pm 3,5$), number of donated oocytes ($12,4 \pm 3,8$ versus $12,7 \pm 3,4$) and embryos transferred ($1,8 \pm 0,4$ vs. $1,9 \pm 0,4$) in day 5 and day 4 groups respectively. Positive pregnancy test (77,6% vs. 65,7%), clinical pregnancy (57,8% vs. 55,2%), implantation rates (43,4% vs. 38,6%) and miscarriage rate (10,8% vs. 13,5%) did not achieve statistical significance. (Figure 1).

Figure 1. Overall clinical outcomes



Material and methods

During a six month period 228 fresh embryo transfers coming from our oocyte donation program were analysed, 67 of which were performed on day 4 and 161 on day 5. The procedure for recipients involved the use of oral estrogen (Progynova) in a step up protocol and vaginal micronized progesterone (Cyclogest). In cases of preserved ovarian activity, a LH-RH agonist depot was used in the luteal phase of the previous cycle. The main outcome measures were positive β -HCG, implantation, clinical pregnancy and miscarriage rate. Results were analyzed using *t-student* test and *chi-square* test. A *P* value of $<.05$ was considered statistically significant.

Conclusions

Clinical outcomes transferring embryos on day 4 or day 5 are comparable, allowing major flexibility to schedule embryo transfer and, therefore, avoiding inconveniences both for patients and the clinic.

