FIRST SUCCESSFUL DAY - 7 EMBRYON TRANSFER FOLLOWING PGD BIOPSY ON DAY 6

OBJECTIVE

Blastocyst stage biopsy for Preimplantation Genetic Screening (PGS) usually takes place on Day 5 of embryonic development and embryo transfer on Day 6. For embryos reaching the blastocyst stage on day 6 they are biopsied and vitrified awaiting for the geneticist's report in order to be transferred in a subsequent cycle due to the perception that implantation occurs only till day 6 of embryonic development. Here, we report the first successful day 7 embryo transfer following PGS biopsy performed on day 6.

MATERIALS and METHODS

A 34 year-old patient underwent one IVF cycle with GnRH long protocol and twenty five eggs were collected among which twenty three eggs were fertilized with donor sperm (non obstructive azoospermia). On day 3 two grade I embryos were selected and transferred and the remaining twenty one embryos were cultured to the blastocyst stage. Six embryos reached the blastocyst stage day 5 and seven on day 6. B-HCG was negative. Patient returned for a frozen blastocyst transfer in a natural cycle. Three embryos were thawed, survived and transferred to patient's uterus. B-HCG was again negative. Following two unsuccessful pregnancy results, the couple requested PGS with Array-CGH in the remaining vitrified blastocysts. Procedure was performed in patient's natural cycle and on day 7 post sLH surge, five blastocysts previously vitrified on day 6 post insemination were thawed and underwent trophectoderm biopsy. The next day (day 8 of progesterone administration and day 7 of embryonic development) three euploid blastocysts were transferred to the patients uterus. Pregnancy was confirmed at 6 weeks by ultrasound diagnosis of a single fetal heart.

Discussion

This is the first pregnancy after day 7 embryo transfer following PGS biopsy on day 6 and our second one of delayed embryo transfer. The latter achieves now term stages of pregnancy.

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