

Comparison between Single and Double Cleavage-Stage Embryo Transfers, Single and Double Blastocyst Transfers in a South East Asian In Vitro Fertilisation Centre

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Abstract

Introduction: This study investigated the differences in clinical pregnancy rate (CPR), live birth rate (LBR) and multiple pregnancy rate (MPR) between double cleavage-stage embryo transfers compared to single and double blastocysts stage embryo transfers in a single academic medical centre. **Materials and Methods:** This was a retrospective cohort study performed at the KK Women's and Children's Hospital In Vitro Fertilisation (KKIVF) Centre of all women who underwent fresh-cycle in vitro fertilisation/intracytoplasmic sperm injection (IVF/ICSI) cycles over a 5-year period. The outcome measures were CPR, LBR and MPR. The study included 5294 cycles, of which 539 patients underwent single embryo transfer (SET); 4533 patients underwent double embryo transfer (DET); 84 patients underwent double blastocyst transfer (DBT); and 65 patients underwent single blastocyst transfer (SBT). **Results:** The mean age of patients undergoing single blastocysts stage embryo transfer was lower than the other 2 groups. The DET, single and double blastocysts stage embryo transfer groups achieved similar LBR (33.9%, 38.7%, 35.4%, $P > 0.05$) and CPR (42.4%, 46.2%, 46.9%). **Conclusion:** We found that single blastocysts stage embryo transfer is associated with similar LBR and CPR compared to double blastocysts stage embryo transfer and DET, with lower MPRs, and should be offered as standard practice, where possible.

Ann Acad Med Singapore 2017;47:451-4

Key words: Infertility, Pregnancy outcomes

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