Comparative Study of Pregnancy Outcomes Between Day-3 and Day-5 Embryo Transfer in IVF Patients

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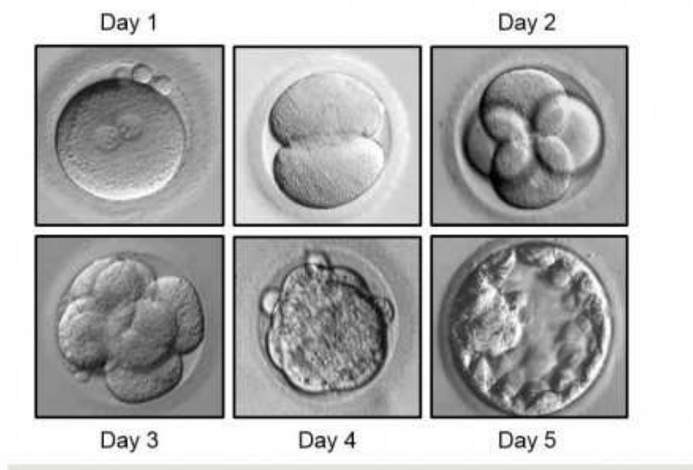
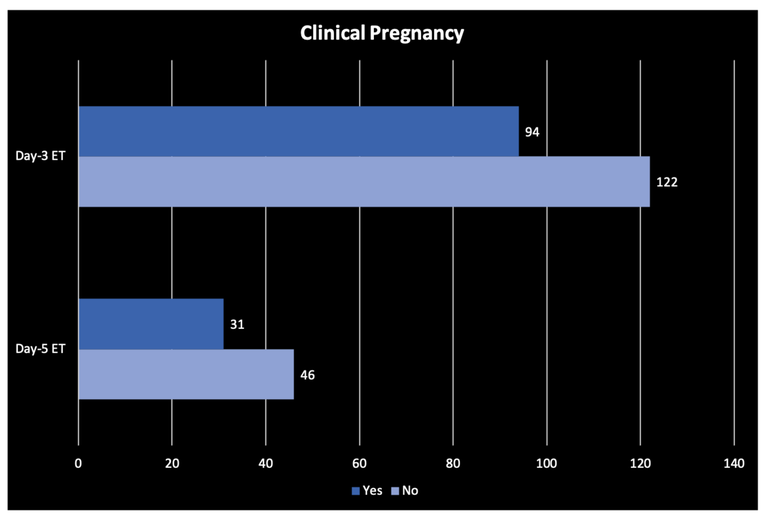
INTRODUCTION

Several options have been proposed to increase the in-vitro fertilization (IVF) success rate, one of them is choosing the day of embryo transfer (ET), as it is considered a crucial and essential step in the practice of assisted reproductive technologies (ART). Human embryos obtained through in vitro techniques are routinely transferred to the uterus on day 2 or 3 when they are at the 4-8 cell stage. The implantation rate of these embryos is disappointingly low, ranging around 20 % (1). Reports in the literature showed increased pregnancy outcomes with blastocyst transfer (2, 3). This study aimed to compare the pregnancy rate between day-3 and day-5 ET toward the clinical pregnancy outcome in Indonesia.



METHODS AND RESULTS

A retrospective cohort study was conducted on IVF patients of Yasmin IVF Clinic, Cipto Mangunkusumo General Hospital, Jakarta, who underwent IVF from January 2018 – October 2019. The data were obtained from medical records. We compared clinical pregnancy outcomes between patients who underwent ET on day-3 and day-5. Clinical pregnancy was defined as the presence of a gestational sac under USG. Chi-square analysis was conducted using SPSS Version 25.



A total of 293 cycles were analyzed. The patient who had ET on day-3 was 73.7% (n=216), of which 43.5% (n=94) of them get positive clinical pregnancy. Meanwhile, the patient who had ET in the blastocyst stage was 26.3% (n=77) of the total sample, with 40.3% (n=31) of the patients get positive clinical pregnancy. There is no significant clinical pregnancy outcome between those two groups (p= 0.62)

CONCLUSION

No statistically significant differences were found in pregnancy outcomes between day-3 and day-5 ET

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