PREGNANCY RATE ON BLASTOCYST VERSUS CLEAVAGE STAGE EMBRYO TRANSFER

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INTRODUCTION

IVF fresh cycle pregnancy rate in Indonesia was still below the pregnancy rate of fresh IVF cycles worldwide in 2012. Based on previous studies, it was found that the blastocyst stage have a higher pregnancy rate than the cleavage stage. The purpose of this study was to improve IVF effectiveness by comparing blastocyst and cleavage embryo transfer

METHODS

The study was conducted in a retrospective cohort design using medical records from Klinik Yasmin RSCM Kencana (2010-2015). Samples were divided into two groups, 120 patients in cleavage stage group and 120 patients in blastocyst stage group. The samples were selected using systematic random sampling method. The samples were analyzed using bivariate chi-square method and logistic regression multivariate method was used to analyze confounding factors.

RESULTS

In the analysis, we found 20,8% proportion difference between the blastocyst stage group to the cleavage stage group (50.8% and 30.0%; $p = 0.006$). In the multivariate analysis, it was found that there were three confounding variables, endometrial thickness (OR=0,239), endometriosis (OR=0,382), and tubal factor (OR=0,445), which significantly affected pregnancy rate.

65,8% of the blastocyst group were < 35 years old, whereas 59,2% of the cleavage group were ≥ 35 years old

More than 60% samples of both group have endometrial thickness $\geq 10,95$ mm

Most of the subjects IVF cycles were due to ovulation disorder ($> 30\%$)

DISCUSSION

CONCLUSION

It was concluded that blastocyst embryo transfer have a significantly higher pregnancy rate than cleavage embryo transfer.

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