

ABSTRACT

Infertility is a condition in the reproductive system that is described by the failure to have a pregnancy after routine sexual intercourse without contraception for 12 months or more. One way to overcome infertility cases is to use In Vitro Fertilization. The aim of this study was to determine and analyze the relationship between endometrial thickness and implantation. The design of this study was a cross-sectional retrospective analytic using secondary data. Independent variable is endometrial thickness. Dependent variable is the implantation rate. The research instrument used was the medical record data of patients undergoing the FIV. Data were processed and then analyzed using univariate and multivariate analysis.

Results: The results showed that there was no correlation between endometrial thickness and implantation rate ($p > 0.05$).

There is an inconsistency in the optimal time used for endometrial assessment. Most studies use endometrial thickness and ecogenicity values measured on the day or one day after administration of hCG and on the day of taking oocytes. In addition, the correlation between endometrial thickness and implantation rate results shown in this study is not merely a causal relationship. This relationship can result from several other factors that also directly affect endometrial receptivity.

In conclusions, it is necessary to agreed on the optimal time used for endometrial assessment. Combined evaluation of endometrial thickness, ecogenicity patterns, and other factors that also directly influence in endometrial receptivity is needed to predict IVF results better than separate evaluations.

Keywords: Endometrial Thickness, Implantation Rate, Infertility, USG, IVF.