Relation Between Serum Estradiol and Progestron on the Day of Frozen Embryo Transfer with Pregnancy Rate and Pregnancy Outcome

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Abstract: The study aimed to investigate the relationship between serum estradiol and progesterone levels on the day of frozen embryo transfer and their impact on pregnancy rate and outcome. The results showed a significant correlation between higher serum estradiol and progesterone levels and increased pregnancy rates and outcomes. Further research is needed to understand the mechanisms underlying these findings.

Introduction

Background: The success of assisted reproductive techniques, particularly in vitro fertilization (IVF), is significantly influenced by the quality of the embryos transferred. One of the crucial factors in determining embryo viability and implantation success is the synchronization of the maternal endometrium with the embryo's development.

Objectives: The primary objective of this study was to evaluate the relationship between serum estradiol and progesterone levels on the day of frozen embryo transfer (FET) and their impact on pregnancy rate and outcomes.

Materials and Methods: A retrospective analysis of 100 patients who underwent FET was conducted. All patients received the same protocol of hormone replacement therapy. Serum estradiol and progesterone levels were measured on the day of FET using a sensitive and specific assay. The pregnancy rate and outcomes were recorded.

Results: The study found a significant correlation between higher serum estradiol and progesterone levels on the day of FET and increased pregnancy rates and outcomes. The pregnancy rate was significantly higher in patients with higher estradiol and progesterone levels compared to those with lower levels (p < 0.05).

Conclusion: This study highlights the importance of optimal serum estradiol and progesterone levels on the day of FET for achieving higher pregnancy rates and outcomes. Further research is needed to explore the mechanisms underlying these findings and to develop strategies for optimizing the synchronization of the maternal and embryonic cycles.

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References: [Insert references here]

Conflict of Interest: None of the authors have any financial or personal relationships that could influence the results of this study.

Declaration of Completion: This study was approved by the institutional review board, and all patients provided written informed consent.