

A Retrospective Multicentric Study of IVF Outcome Post Blastocyst Transfer Derived from Vitrified Thawed Cleavage Embryos -Extended Culture

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AIM AND OBJECTIVE:

To evaluate IVF outcome after transfer of a blastocyst cultured from vitrified thawed cleavage embryos (VTCE) compared with conventional frozen thawed blastocyst transfer (FBT). To assess the clinical pregnancy rate, implantation rate and abortion rate between the two groups.

METHODOLOGY:

A Retrospective Study performed on Total 158 patients who underwent Embryo Transfer

Group A
BZ PATIENTS
Patients who
underwent
conventional
FBT cycle.

76 PATIENTS

Patients who underwent vitrified thawed cleavage embryos followed by blastocyst transfer

Group B

RESULT: The table shows no significant difference in clinical pregnancy, implantation and early miscarriage rates with p value >0.05.

	Group A (FBT)	Group B (VTCE)	p value
Pregnancy rate	58.53	64.47	0.243
CPR of all positive Bhcg	75	83	
CPR of all ET patients	43.9	53.94	
Abortion rate	25	17	
Implantation rate in positive CPR	68.11	56.96	
Implantation rate of all embryos transferred	29.55	30.61	
Multiple pregnancy rate	25	9.7	

POSSIBLE REASONS:

The slight difference in early miscarriage was probably related to better selection after the extended culture of cleavage embryos while frozen blastocysts were transferred in 2-3 hours after thaving.

Prolonged culture of cleavage embryos to blastocyst stage has been proposed as an effective strategy to evaluate resumption of mitosis of blastomeres and to further selection of chromosomally convertent embryos.

CONCLUSION:

This study suggest extended culture of frozen thaw cleavage embryos can be an alternative option to conventional FBT and can be considered as a practice model that includes freezing cleavage embryos in fresh cycles and subsequent transfer of blastocysts cultured from these thawed cleavage embryos for better outcomes.

STATISTICAL ANALYSIS:

Chi Square test for independence was used for comparison of two categorical variables between the two groups. (p<0.05)

