Title:

DOES THE DURATION OF TIME BETWEEN DILATATION AND CURETTAGE AND SINGLE EUPLOID FROZEN EMBRYO TRANSFER AFFECT CLINICAL OUTCOME?

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Background:

Current recommendations on surgical management have yet to establish an optimal interval of time between dilatation and curettage (D&C) and subsequent embryo transfer (ET). Prior studies on the topic have been confounded by model variability, including variations in endometrial preparation, embryo number, and the presence or absence of preimplantation genetic testing (PGT) prior to ET.

Objective:

This study sought to determine if there is an optimal time period between D&C and subsequent frozen embryo transfer (FET) to optimize the likelihood of implantation.

Materials and Methods:

The retrospective study included patients that underwent a D&C for early pregnancy loss (EPL) and subsequently had a single, euploid transferred from 2012 to 2017. Embryos were screened using array comparative genomic hybridization (aCGH), quantitative polymerase chain reaction (qPCR), and next-generation sequencing (NGS) platforms. Multivariate binary logistic
regression analysis (controlling for oocyte age, age at transfer, BMI, endometrial thickness, day of embryo biopsy and gestational age (GA) at time of D&C was used to evaluate interval from D&C to subsequent FET. Primary outcomes included: implantation, ongoing pregnancy and EPL.

**Result(s):**

A total of 207 patients were included in the study. The average time interval between D&C and subsequent FET was 409.0 days ± 563.5 (Range: 32-4871 days). The average GA at time of D&C was 8.7 weeks ± 1.5 (Range: 6.3-19.1 weeks). The interval of time from D&C to FET did not influence odds of implantation (OR 1.0 [95% CI 1.0-1.001], p=0.09), ongoing pregnancy (OR 1.0 [95% CI 1.0-1.001], p=0.22), or EPL (OR 1.0 [95% CI 0.99-1.0], p=0.22). In addition, GA at D&C did not influence the odds of implantation (OR 0.98 [95% CI 0.8-1.2], p=0.83), ongoing pregnancy (OR 0.99 [95% CI 0.8-1.2], p=0.89) or EPL (OR 1.2 [95% CI 0.96-1.5], p=0.10).

**Conclusion(s):**

The interval of time between D&C and subsequent FET did not alter the rate of implantation, ongoing pregnancy, or EPL. Patients that proceeded to a FET 32 days after D&C were shown to achieve comparable outcomes to patients with longer intervals ranging from several months to years. Patients and clinicians can be assured that a subsequent FET cycle can begin as early as 5 weeks following management of an EPL.

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**References:**

None