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ECTOPIC PREGNANCY RATES IN DAY 3 VERSUS DAY 5 EMBRYO TRANSFERS IN FRESH IVF CYCLES

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Objective:

The objectives of this study were to compare ectopic pregnancy rates (EPR) in cycles resulting from day 3 (D3) versus (v.) day 5 (D5) ET and to determine what variables were predictive of higher EPR.

Design:

Retrospective case control study.

Materials and Methods:

IVF cycles done at a major infertility center between 2007 and 2012 were reviewed. Three-hundred thirty-six cycles fulfilled the following inclusion criteria: non-donor, non-PGD cycles with fresh embryos transferred on D3 or D5 that resulting in a clinical pregnancy (defined as a gestational sac seen on ultrasound) or ectopic pregnancy (EP). Parametric and nonparametric statistical analyses were used to evaluate differences between D3 and D5 ET. Hierarchical logistic regression analyses were used to determine the cycle parameters significantly predictive of higher EPR (controlling for female age, assisted hatching, and number of embryos transferred).

Results:

When divided into D3 and D5 ET groups, women in the D3 ET group were significantly older than the D5 ET group (37.1 ± 3.8 vs. 35.0 ± 4.4 , $p < 0.001$). There were 145 total pregnancies resulting from D3 ET, of which 2.8% were EP. Similarly, of the D5 ET, 4.7% EP of the 191 total pregnancies were reported. This difference in EPR between groups was not statistically significant ($p = 0.358$). The multivariate analyses did not supported a significant positive relationship between D5 ET and EPR.

Conclusions:

There was no difference in EPR following D3 or D5 ETs. The decision to transfer D3 or D5 embryos should be made on an individual case-by-case basis, independent of ectopic pregnancy risk.

Support:

None.