DONOR SPERM (DS) UTILIZATION FROZEN EMBRYO TRANSFER (FET) CYCLES HAS INCREASED IN TANDEM WITH IMPROVED ACCESS TO CARE FOR ALL PATIENTS (PTS) WHO UTILIZE DS

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Background

DS allows for increased reproductive autonomy and opportunities for those with male factor infertility (MF) and some with situational infertility [people assigned female at birth (AFAB) who desire single parenthood by choice (SPBC) and same sex AFAB couples (SS)]. While many pts successfully utilize DS intrauterine inseminations (IUI), there are limited data on those that require a higher-level of assisted reproductive technology (ART) care.

Objective

Our objective was to evaluate DS FET trends and outcomes.

Materials and Methods

This was a retrospective cohort study of all DS FETs at a single urban academic fertility center from 2016-2023. Variables included pt age at embryo creation and transfer, donor egg (DE) usage, DS type, and indication for DS. The primary outcome was FET outcome defined as a live birth or ongoing pregnancy (LB/ON), a biochemical or miscarriage (SAB), an ectopic (ECT), a termination (TAB), or a negative test (NEG). Secondary outcomes included how DS use changed over time, use of preimplantation genetic testing (PGT) and embryo sex selection. Statistics included Chi-Square and Kruskal-Wallis tests ($p<0.05$ considered significant).

Results

Of 10,014 FETs during the study period, 676 (6.8%) were DS FETs from 428 pts. Indications for DS were documented for 384 pts who underwent 605 FETs (277 (45.8%) SPBC, 91 (15.0%) MF, 237 (39.2%) SS). There were no differences in the proportion of MF, SPBC, or SS DS FETs over time (p=0.42) and the proportion of DS usage in all FETs was stable over time (5.1-7.6%, p=0.4).

SPBC pts were older at egg retrieval (median 41 years (y) SPBC, 35y MF, 36y SS, p<0.001) and FET (41y SPBC, 36y MF, 37y SS, p<0.001), and more likely to utilize DE (15.2% SPBC, 3.3% MF, 3.8% SS, p<0.001) and PGT (94.2% SPBC, 87.9% MF, 86.5% SS, p<0.01). SS pts were more likely to use directed DS (2.9% SPBC, 4.4% MF, 10.5% SS, p<0.001). All groups used sex selection equally (27.8% SPBC, 38.5% MF, 28.7% SS, p=0.14), with SPBC pts more likely than MF pts to choose a female embryo (80% SPBC vs. 52.9% MF, p<0.004). A sub-group analysis of all SS couples showed that the use of reciprocal (RECIP) in vitro fertilization (IVF) has no obvious trend over time (14.3-42.3%, p=0.54).

There were no differences in treatment outcomes among the DS users (p=0.32). Among SS pts, there were no differences in treatment outcomes when comparing RECIP IVF pts to autologous IVF pts (p=0.58).

Conclusions

Increasing access to care has improved for all pts who need DS ART. Treatment outcomes after a DS FET are similar regardless of DS indication. Pts using DS can be reassured that LB rates

are comparable for DS users at our center to all published LB rates from the Society for Assisted Reproductive Technology (SART) [1].

Support
None

References

1. 2021 Assisted Reproductive Technology Fertility Clinic and National Summary Report. Centers for Disease Control and Prevention. US Dept of Health and Human Services; 2023. Accessed April 23, 2024. https://www.cdc.gov/art/reports/2021/index.html.