RESULTS: We found that the noncompliance rate stayed virtually the same between 2011-12 and 2013; in both time frames, >70% of donor IVF cycles were noncompliant and transferred 2 or more blastocyst embryos. The clinical pregnancy rates, live birth rates, and multiple pregnancy rates showed no difference between the two time frames.

### Noncompliant donor IVF cycles from 2011-12 compared with 2013, with fresh blastocyst transfer

<table>
<thead>
<tr>
<th></th>
<th>2011-12</th>
<th>2013</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>10238</td>
<td>2760</td>
<td>NA</td>
</tr>
<tr>
<td>% noncompliant</td>
<td>72.4</td>
<td>71.2</td>
<td>0.23</td>
</tr>
<tr>
<td>Oocytes, mean (SD)</td>
<td>22 (9.9)</td>
<td>22 (10.2)</td>
<td>0.1</td>
</tr>
<tr>
<td>ET, mean (SD)</td>
<td>2.1 (0.3)</td>
<td>2.0 (0.3)</td>
<td>0.09</td>
</tr>
<tr>
<td>ET, range</td>
<td>2-6</td>
<td>2-11</td>
<td>NA</td>
</tr>
<tr>
<td>Cryopreserved, mean (SD)</td>
<td>4.2 (4.1)</td>
<td>4.4 (4.3)</td>
<td>0.14</td>
</tr>
<tr>
<td>CPR, %</td>
<td>72.0</td>
<td>70.6</td>
<td>0.21</td>
</tr>
<tr>
<td>LBR, %</td>
<td>63.0</td>
<td>60.7</td>
<td>0.23</td>
</tr>
<tr>
<td>Singleton %</td>
<td>47.2</td>
<td>48.0</td>
<td>0.67</td>
</tr>
<tr>
<td>MPR, %</td>
<td>52.8</td>
<td>52.0</td>
<td>0.67</td>
</tr>
<tr>
<td>Multiple LB, %</td>
<td>46.2</td>
<td>48.0</td>
<td>0.29</td>
</tr>
</tbody>
</table>

ET = embryos transferred; CPR = clinical pregnancy rate; LBR = live birth rate; MPR = multiple pregnancy rate; LB = live births.

CONCLUSIONS: In donor-oocyte IVF cycles, which inherently have a very favorable prognosis, we continue to see a high level of embryo transfer noncompliance and a high rate of multiple pregnancies. Despite the recommendation for single embryo transfer in this population, the majority of IVF cycles in the US underwent transfer of 2 donor-oocyte blastocysts in 2013. The multiple pregnancy rate remains unacceptably high at over 50%. The 2014 data was not available to us at the time of submission, and we plan to update the results accordingly.

P-575 Wednesday, October 19, 2016

**THE SUCCESS RATE OF INTRAUTERINE INSEMINATION AFTER FAILED OOCYTE RETRIEVAL.** M. Irani,1 V. Gunnal,1 I. Kligman,2 Z. Rosenwaks,3 "Reproductive Endocrinology and Infertility, Weill Cornell Medicine, New York, NY; 1OB/GYN, REI Fellow, New York, NY; 2Weill Cornell Medical College, New York, NY; 3Weill Cornell Medicine - Center for Reproductive Medicine, New York, NY.

OBJECTIVE: There are few available options for patients undergoing IVF and who did not have oocytes recovered during oocyte retrieval; these include intra-uterine insemination (IUI), intercourse, or no intervention. In the present study, we aim to determine the success rate of intra-uterine insemination (IUI) performed within an hour after failed oocyte retrieval.

DESIGN: Retrospective cohort study.

MATERIALS AND METHODS: Among patients who underwent autologous fresh IVF cycles between January 2004 and May 2013, those who underwent IUI after failed oocyte retrieval were included. Patients with history of male factor or tubal factor infertility were excluded. Values were expressed as mean ± SEM.

RESULTS: A total of 19709 IVF cycles were reviewed; 60 cycles (0.3%) had no recovered oocytes during oocyte retrieval. 2460 patients underwent IUI within an hour after failed retrieval; none of them achieved a clinical pregnancy. The age of patients who had failed oocyte retrieval was 38.8 ± 0.6 years. Estradiol level was 661 ± 81 pg/mL on the day of HCG trigger and 775 ± 99 pg/mL on the day after HCG trigger. LH was not elevated on the day of HCG trigger (5 ± 3 mIU/mL). β-hCG levels were normal (200 ± 17 mIU/mL) on the day after HCG trigger.

CONCLUSIONS: The success rate of IUI rescuing failed oocyte retrieval is negligible. Patients need to be educated about the low expectations of rescue IUI.

P-576 Wednesday, October 19, 2016

**ELECTIVE SINGLE EMBRYO TRANSFER IN WOMEN UNDER AGE 38 REDUCES MULTIPLE BIRTH RATES BUT NOT LIVE BIRTH RATES IN UNITED STATES FERTILITY CLINICS.** A. Mancuso,1 S. Boulet,1 E. Duran,2 E. M. Munch,3 D. M. Kissin,3 B. J. Van Voorhis,3 Obstetrics and Gynecology, University of Iowa Hospitals and Clinics, Iowa City, IA; 3Division of Reproductive Health, Centers for Disease Control and Prevention, Atlanta, GA.

OBJECTIVE: To determine whether there is a difference in perinatal outcome when in vitro fertilization (IVF) with a fresh embryo transfer is compared to IVF using cryopreserved embryos.

DESIGN: Retrospective cohort study.

MATERIALS AND METHODS: Data were collected on all autologous fresh IVF cycles performed in 2013 and reported to the National Assisted Reproductive Technology Surveillance System (NASS). Cycles using preimplantation genetic diagnosis or screening were excluded. The analysis was stratified by patient age (<35 and 35-37). Clinics were divided into groups based on eSET rates: 0-9%, 10-19%, 20-29%, 30-39%, 40-49%, >=50% for age <35 and 0-9%, 10-19%, 20-29%, >=30% for age 35-37. Aggregate rates of live birth per embryo transfer and multiple birth per delivery were calculated for each eSET group after controlling for significant confounding variables (number of cycles per year, ICSI rate, blastocyst versus cleavage stage embryo transfer, average patient age, number of prior ART cycles, parity, race).

RESULTS: 464 clinics were analyzed for the age <35 group and 450 clinics for the age 35-37 group. There was a linear decrease in multiple birth rate with increasing eSET rate and no significant difference in clinic-level live birth rates. (Table). Clinics with a higher average eSET rate tended to perform more blastocyst embryo transfers (day 5-6 of culture) and had higher average embryo implantation rates.

CONCLUSIONS: Our study showed a marked and linear reduction in multiple birth rates and importantly, little to no effect on live birth rates with increasing rates of eSET. This study supports the growing evidence that eSET is effective in decreasing the high multiple birth rates associated with IVF and suggests eSET should be utilized more frequently than is currently practiced.

Live birth rates and multiple birth rates by clinic elective single embryo transfer rate

<table>
<thead>
<tr>
<th>Clinic eSET rate (Age &lt;35)</th>
<th>0-9%</th>
<th>10-19%</th>
<th>20-29%</th>
<th>30-39%</th>
<th>40-49%</th>
<th>&gt;=50%</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of clinics</td>
<td>219</td>
<td>96</td>
<td>55</td>
<td>41</td>
<td>17</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Live birth rate (%)</td>
<td>45.2</td>
<td>49.6</td>
<td>48.0</td>
<td>48.1</td>
<td>43.8</td>
<td>44.5</td>
<td>0.10</td>
</tr>
<tr>
<td>Multiple birth rate (%)</td>
<td>37.5</td>
<td>33.2</td>
<td>28.6</td>
<td>27.3</td>
<td>16.3</td>
<td>15.2</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Clinic eSET rate (Age 35-37)</td>
<td>0-9%</td>
<td>10-19%</td>
<td>20-29%</td>
<td>&gt;=30%</td>
<td>P-value</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of clinics</td>
<td>331</td>
<td>61</td>
<td>29</td>
<td>29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live birth rate (%)</td>
<td>38.4</td>
<td>35.1</td>
<td>32.4</td>
<td>41.3</td>
<td>0.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple birth rate (%)</td>
<td>29.8</td>
<td>22.1</td>
<td>19.7</td>
<td>18.5</td>
<td>&lt;0.001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>