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preparation in the assisted reproductive treatment cycle, motility (percent motile) and sperm count were assessed with light microscope according to WHO criteria and performed just before the fertilization procedure. Data were analyzed using Pearson correlation test, Chi-square Tests, one-way analyses of variance (ANOVA), and logistic regression model. Tukey test was used post-hoc for multiple comparisons. \( p < 0.05 \) was considered statistically significant. All statistical analyses were performed using Windows SPSS version 10.0 software.

RESULTS: The mean of male and female ages were 35.1 (±5.6) and 32.1 (±5.0) respectively. Group C was associated with lower semen volume whereas group B with higher total sperm count. The percentage of the MIL oocyte fertilization had no correlation either with the male age or female age. The number of the arrested embryos was negatively correlated only with female age \( (p = 0.026) \). Male and female ages were both negatively correlated with the number of grade 1 embryos \( (p = 0.001) \) and number of transferred embryos \( (p = 0.001) \) on day 3. Although female age showed higher odds ratio for pregnancy outcome in a logistic regression model that investigated the interaction of age on the pregnancy outcome, there was no statistical significance \( (p < 0.01) \).

CONCLUSIONS: Male age has a predictive value in semen quality. Although male age is observed as a confounding factor in good embryo development, female age appears as a dominant determinant factor.

Supported by: None.

IVF (IN VITRO FERTILIZATION) VS. ICSI (INTRACYTOPLASMIC SPERM INJECTION) IN SIBLING OCYCTES FROM PATIENTS WITH NORMOZOOSPERMIC SEMEN. J. Yue, G. J. Zhu, X. M. Liu, Q. Liu, Reproductive Center, Tongji Hospital, Wuhan, Hubei Province, China.

OBJECTIVE: To compare the fertilization rate and embryonic development of oocytes inseminated by conventional IVF (in vitro fertilization) or ICSI (intracytoplasmic sperm injection) in patients with normozoospermic semen during IVF cycle.

DESIGN: A retrospective study.

MATERIALS AND METHODS: Sibling oocytes were randomized to be inseminated either by ICSI or conventional IVF.

RESULTS: A total of 1555 COC (cumulus-oocyte complexes) were collected in 114 cycles. Totals of 786 and 769 were inseminated by IVF and ICSI respectively, with a significantly higher fertilization rate in the ICSI group (ICSI vs. IVF 72.3% vs. 61.4%). No fertilization failure occurred in the group of oocytes inseminated by ICSI, whereas the COC in 17 patients (14.9%) inseminated by conventional IVF had complete fertilization failure. The best embryos were selected for embryo transfer independently of the insemination procedure and there appeared to be no difference in implantation rate and pregnancy rate of the embryos obtained with either technique after the non-randomized transfers.

CONCLUSIONS: ICSI may improve the fertilization rate in patients with normozoospermic semen during IVF cycle but the implantation potency of the embryos was not different regardless of the insemination method. More researches are needed to make clear the indicator of ICSI for patients with normozoospermic semen during IVF cycle in order to avoid complete fertilization failure and unnecessary ICSI.

Supported by: None.


OBJECTIVE: This retrospective trial was designed to prove whether double insemination increase the conception rate in women underwent intrauterine insemination (IUI) cycles.

DESIGN: Retrospective study.

MATERIALS AND METHODS: A total 94 patients were divided into two groups. All patients were treated with an individualized low dose FSH (Gonal F: Merck Serono, Switzerland) regimen started on day 2-3 of menstrual cycle. GnRH antagonist (Cetrorelix 0.25, Merck Serono, Switzerland) was added to therapy if at least one follicle >14 mm was detected at ultrasound. Ovulation was triggered by 10.00 IU HCG (Pegovin, Organon, Switzerland) when at least one follicle >18 mm was observed. In group A (n = 57) a double IUI was performed at 12 and 32 hours after hCG injection. In group B (n = 37) single IUI was performed at 32 hours after hCG injection. The secondary efficacy outcome was the conception rates. All results were analysed by using the Chi-square test and Student's t test and \( p < 0.05 \) was considered statistically significant.

RESULTS: Baseline characteristics of the two groups were similar. The conception rates were in group A and B similar, 19.3% vs. 18.9% respectively.

<table>
<thead>
<tr>
<th>TABLE 1.</th>
<th>Group A (n = 57)</th>
<th>Group B (n = 37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>28.6</td>
<td>27.5</td>
</tr>
<tr>
<td>Basal FSH (mIU/ml)</td>
<td>6.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Basal LH (mIU/ml)</td>
<td>6.3</td>
<td>6.4</td>
</tr>
<tr>
<td>Lenght of stimulation (days)</td>
<td>10.45</td>
<td>10.3</td>
</tr>
<tr>
<td>Total dose of FSH (IU)</td>
<td>1.74</td>
<td>1.73</td>
</tr>
<tr>
<td>Mean follicle number</td>
<td>1.74</td>
<td>1.73</td>
</tr>
<tr>
<td>Endometrium thickness (mm)</td>
<td>9.0</td>
<td>9.2</td>
</tr>
<tr>
<td>Peak estradiol (pg/ml)</td>
<td>609</td>
<td>637</td>
</tr>
<tr>
<td>Antagonist used (days)</td>
<td>2.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Conception rate (%)</td>
<td>19.3</td>
<td>18.9</td>
</tr>
</tbody>
</table>

CONCLUSIONS: Double IUI have no additional effect on the success of IUI cycles at least by patients who underwent FSH – GnRH antagonist stimulation.

Supported by: None.

FULFILLMENT OF NEXT-CHILD DESIRE AND OUTCOME OF PREGNANCIES IN A COHORT OF 1039 WOMEN WHO GAVE BIRTH THROUGH ART. S. Epelbaum, C. Avril, A. Amp-Révélation, G. Nisand. Reproductive Medicine and Obstetrics, Hospital Saint Vincent de Paul, Paris, France; Reproductive Medicine, Clinique du Bois-Guillaume, Bois-Guillaume, France; Amp-Révélation, Follow-Up Association, Villennes Sur Seine, France; Public Health, Hopitaux Universitaires de Strasbourg, Strasbourg, France.

OBJECTIVE: To appreciate the occurrence of pregnancies and their outcome, in a cohort of women with at least one 3 years old child obtained by Assisted Reproductive Techniques (ART) and willing another child.

DESIGN: Retrospective clinical study.

MATERIALS AND METHODS: A questionnaire was sent in 2006 to 1200 mothers of a 3 years old child, who gave birth after ART, and agreed to be included in a long-term survey developed for several French ART centres by Follow-Up association. 1039 (87%) answered the questionnaire. We investigated if mothers either wished to try exclusively a natural pregnancy, or accepted ART in case of failure, or will only transfer frozen embryos, or wished to undergo straightforward a new process of ART.

RESULTS: For the referent pregnancy, 448 women (43%) conceived in IVF, and 391 (60%) in ICSI, 108 (10%) via Frozen Embryo Transfer (FET). At the time of the study, 79% of the mothers and fathers were respectively less than 39 and 42. 486 women (47%) declared willing another child. A temporary contraception has been chosen by 212 (44%), 74 (21%) chose to try natural pregnancy but will not accept new ART process, 58 (16%) asked for FET, but will not make another attempt of IVF; 132 (37%) chose to try naturally and undergo ART in case of failure, 96 (27%) initiated directly IIIF; 126 had not a definitive choice. 352 (72%) achieved a pregnancy, 97% with the same partner, 145 women (30%) conceived without ART and 207 (43%) through ART (50IVF, 102 ICSI, 42 FET, 4 inseminations). The rate of early miscarriage and ectopic pregnancy were respectively 15% and 2% of the total pregnancies without any differences according to assisted or natural conception. Furthermore, the rate of deliveries is 64% and 83% of natural or ART pregnancies.

CONCLUSIONS: The quality of this survey results in a very high response rate to our questionnaire (87%). Three years after birth, nearly half of mothers (47%) were candidate to fulfill a new pregnancy, among which 67% agreed for ART. 72% of them obtained the desired pregnancy, and 60% gave birth. Pregnancies occurred as a result of ART in 42%, and naturally in 30% of cases. These high rates, in a selected population in which ART was already once successful, indicate that women who chose to try another pregnancy were probably those who were hopeful because of their young age and good indication. Nevertheless, we were surprised by the high rate of natural pregnancies, raising questions about the psychological benfits of success in ART.

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