

using SrCl<sub>2</sub> in six patients of <=40% fertilization rate by conventional ICSI. 30 minutes after ICSI, the removed oocytes were individually transferred into 20 µl drops of Dulbecco's Modified Eagle Medium (DMEM) without calcium chloride (Invitrogen Corporation) containing SrCl<sub>2</sub> (Sigma) (10mM) with 10% SSS(Irvine Scientific) under mineral oil, and were cultured for 60 minutes at 37°C under a 6% CO<sub>2</sub>, 5% O<sub>2</sub>, and 89% N<sub>2</sub>. After that, they were put into a Universal IVF Medium (Medicult), and cultured until the fertilization check. The grade of embryos was classified by Gardner's criteria.

**RESULTS:** Note: the results of the cycles in each case are shown: [the number of retrieved oocytes, MII, 2PN (fertilization rate %), cleavage embryos] Case A: The wife was 29 year old and had normal findings. The husband was 33 year old and showed severe oligo-asthenospermia. The first cycle was [22, 8, 1 (12.5%), 6cell >50%] with no embryo transfer. The second cycle was [34, 19, 5 (26.3%), 6cell >50% x2] with no embryo transfer. The third cycle was [30, 19, 9 (47.4% after oocyte activation), one 8cell > 50% (D3) + one 5CC blastocyst (D6)] with embryo transfer and a healthy boy weighing 3152g was born at 41 weeks gestation. Case B: The wife was 36 year old and had normal findings. The husband was 39 year old and showed severe oligo-asthenospermia. At another clinic, 3 previous cycles were performed. The fertilization rate was 40% (4/10), 22.2% (2/9), and 33.3% (1/3), but failed. At our clinic, the first cycle was [2, 1, 0 (0%)] and embryo transfer was cancelled. The second cycle was [7, 6, 6 (100% after oocyte activation), and one 4 cell (D2) and one 3BB blastocyst (D5) were transferred]. The result was a successful pregnancy, but became a missed abortion at 8 weeks gestation. The third cycle was [8, 5, 3 (60% after oocyte activation), and one morula (D3) and one 5BB blastocyst (D6) were transferred] and, two healthy boys weighing 2266g and 1950g at 38 weeks gestation. Case C: The wife was a 31 year old woman with bilateral tubal occlusion and endometriosis. The husband was 34 year old and his semen analysis was normal. At another clinic, although IVF were performed, both attempts failed. The first cycles was performed using a conventional IVF [9, 6, 0(0%)]. The second cycle was performed ICSI [9, 6, 2(33.3%), embryo development arrest(so embryo transfer was cancelled)]. The third cycle was [11,9,3(33.3%) after oocyte activation, one early blastocyst(D5) were transferred], but failed. And the fourth cycle was [8,6,5 (83.3%) after oocyte activation, and two early blastocysts and one 3BA were transferred] and a healthy girl weighing 2854g was born at 39 weeks gestation.

**CONCLUSION:** The artificial oocyte activation using SrCl<sub>2</sub> is beneficial for patients of no or low fertilization. But further studies are needed to confirm the safety of this oocyte activation.

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## P-72

**WHICH CATHETER SHOULD BE USED FOR IUI: FIRM OR SOFT!!** H. G. Al-Inany, A. Abousetta, R. Mansour, G. Seror, M. Aboulghar. Cairo Univ, Cairo, Egypt; Egyptian IVF-ET center, Cairo, Egypt; Al-Azhar university, Cairo, Egypt.

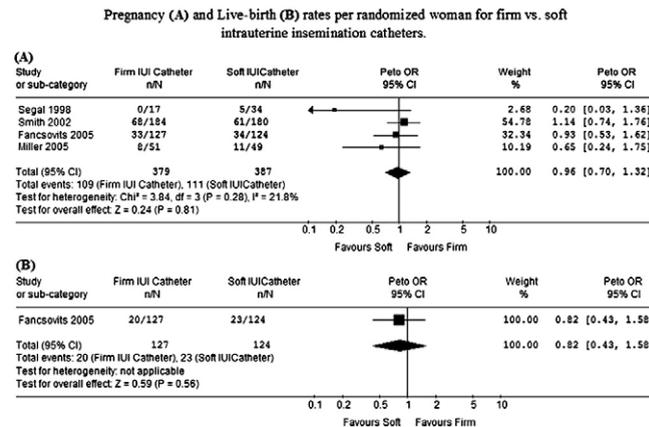
**OBJECTIVE:** Recently it was proven that the role of catheter is a determining factor is the success of embryo transfer cycles. However, its role is not clear with regards IUI. Therefore, we systematically reviewed the literature so that we could evaluate if the use of soft catheters were preferable to firm catheters in subfertile couples undergoing IUI.

**DESIGN:** Systematic review and meta-analysis of randomized controlled trials comparing soft versus firm catheters for IUI. Meta-analysis of dichotomous data was performed using the Peto-modified Mantel-Haenszel method utilizing a fixed-effect model, and the odds ratio (OR) and 95% confidence intervals (CIs) evaluated.

**MATERIALS AND METHODS:** Extensive searches were conducted for full-text manuscripts, conference abstracts, ongoing and unpublished trials using computerized (e.g. MEDLINE, EMBASE, the Cochrane Library) and hand searches (reference lists of primary studies, review articles, relevant publications, abstracts of major scientific meetings (e.g. ESHRE and ASRM) and included studies). Finally, the reviewers sought ongoing and unpublished trials by contacting experts in the field and commercial entities. Primary outcomes were clinical pregnancy (CPR) and ongoing pregnancy (OPR)/live birth rates (LBRs) per woman. Secondary outcomes were multiple pregnancy rate (MPR) per clinical pregnancy, difficulty cannulating the cervix, bleeding and patient discomfort.

**RESULTS:** Seven trials were identified [three full-text papers (Smith et al., 2002; Fancsovits et al., 2005; Miller et al., 2005) and four conference abstracts (Segal et al., 1998; Murber et al., 2002; Spiessens et al., 2003;

Miller et al., 2004)]. Of these studies, two conference abstracts were excluded because they were also published as full-text manuscripts (Murber et al., 2002; Miller et al., 2004). In addition, one conference abstract (Spiessens et al., 2003) was excluded because it compared a soft IUI catheter with a soft embryo transfer catheter. The remaining studies (n = 4) were evaluated further and included. No significant differences were noted for CPR and LBR per woman [OR = 0.96, 95% CI =0.70-1.32 and OR = 0.82, 95% CI = 0.43-1.58, respectively]. As for the secondary outcomes, MPRs per cycle were also not significantly different. More difficulty was noted with soft catheters and more patient discomfort with firm catheters. Bleeding following the procedure was similar between the two groups.



**CONCLUSION:** Unlike embryo transfer, catheter choice during intrauterine insemination does not seem to be a detrimental factor for success. More studies are warranted to draw definitive conclusions and support the results of this systematic review.

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## P-73

**CERVIX INFECTION, CERVIX CYTOPATHOLOGY AND THE OUTCOME OF IVF-ET IN CHINESE WOMEN.** Y. Wang, Q. Jie, W. Changjuan, C. Xinna, L. Siqun, H. Xiaoyang. Peking Univ Third Hospital, Beijing, China, China.

**OBJECTIVE:** To study the relationship among the cervix infection, the cervix cytopathology detected by TCT and the outcome in Chinese women undergoing IVF-ET.

**DESIGN:** Retrospective, controlled study.

**MATERIALS AND METHODS:** One thousands and forty-four patients enrolled in an IVF from Jan 1 to Dec 31. The main cause of sterility was a pathologic tubal factor or an abnormal spermogram in the male partner. Entry criteria were a duration of sterility of more than 1 year, a patient age of 25-38 years, a morphologically normal uterus and cervix, and ≥2 good-quality embryos transferred. Patients were older than 38 years old, poor respond to Gonadotropin, the number of transfer embryos less than 2, poor quality of embryo or with prior cervical surgery, cervical dysplasia and cervical cancer were excluded. Cervical scrapes were obtained with a cytobrush before ovarian stimulation with gonadotropins. Only LSIL, HSIL and HPV positive patients were detected by digital colposcopy and cervical biopsy. Main Outcome Measure(s): Pregnancy rate, follicle and retrieved oocyte number, embryo quality, the amount of Gonadotropin and HMG were compared among the different groups with different cervix change.

**RESULTS:** All the 1044 patients are divided into two groups depending on the pregnant outcome of IVF-ET, there are 415 patients in pregnant group and 629 in non-pregnant group. All patients are matched on either the age, education degree, cause of infertility, duration of infertility and the style of infertility, or on the types of IVF between two groups. The pregnant rate is 39.75%, including singleton 29.5%, natural abortion 3.64%, ectopic rate 2.01% and twins pregnancy 4.6% in these cohort patients with IVF-ET. There are not any significant difference in the different degree of clinical sign of cervicitis between two groups without any therapy (smooth:10.36%&8.43%, mild erosion: 51.81%&58.51%, middle erosion: 24.10%&26.23% and severe erosion: 13.73%&6.84%). While there are no statistical difference when comparing the infection rate excluding the trichomonas, moniliasis and bacterial vaginosis (non infection: 76.39%&69.16%, mild infection: 0.96%&1.11%, middle infec-