Cook and Sage embryos, P = 0.6. The AET was 2.4 from the Cook media system and 2.3 from the Sage media. P = 0.5.

CONCLUSIONS: The Minc incubator using Cook media resulted in higher FR, IR and CPR as compared with Forma incubators using either Cook or Sage media in our lab. The Minc temp, RH and CO2 concentration recover from an opening fifteen times faster than the Forma. Improved results are seen using this duo of incubator system and culture media.

Supported by: None.

ART-OTHER

A-81

PGS AND PGD AS EFFICIENT TOOLS TO SELECT EMBRYOS WITH A HIGHER IMPLANTATION POTENTIAL IN ADVANCED MATERNAL AGE PATIENTS. C. C. Rocha, S. A. S. Fonseca, R. C. Serafim, V. Abdelmassih, R. Abdelmassih, S. Abdelmassih. ART, Roger Abdelmassih Human Reprod. Clin. and Res. Ctr., São Paulo, Brazil.

OBJECTIVE: Preimplantation genetic diagnosis (PGD) and preimplantation genetic aneuploidy screening (PGS) techniques are important tools to select embryos that are free from certain genetic disorders. The aim of this study was to evaluate the efficiency of PGD and PGS in patients from different age groups.

DESIGN: Retrospective.

MATERIALS AND METHODS: A longitudinal observation study was performed comparing two groups of patients: G1, where 192 patients were subjected to PGD or PGS and G2, where 986 patients were included as a control group. The inclusion criteria for patients in G1 were: implantation failure, previous miscarriages due to fetal chromosomal abnormalities, >3 good morphology embryos available for biopsy, history of inherited genetic disease and X linked disorders. A total of 879 and 4579 embryos were obtained in G1 and G2, respectively. PGD and PGS were performed by fluorescence *in-situ* hybridization (FISH). The chromosomes that were analyzed were as follows: X, Y, 13, 16, 18, 21 and/or 22, depending on the indication. Statistical analyses were performed using the Chi-square test and one-Way ANOVA with significance at P<0.05.

RESULTS: Mean age of female patients in G1 and G2 was 37.4 ± 5.73 and 34.1 ± 4.57 years, respectively. The clinical pregnancy rate was not statistically different in G1 (49.0%) when compared to the control group (56.3%). In G1 66.1% of the patients and 40.3% in G2 were >35 years. The implantation and pregnancy rates of patients (>35 years) were similar in both groups (12.7% and 32.8% vs. 12.1% and 33.2%) in G1 and G2, respectively. In the PGS group, the pregnancy and the miscarriage rates (42.9% and 13.3%) registered in patients >35 years were better than the observed in the same age group from G2 (33.2% vs. 35.8%). The best results were observed in PGS patients >40 years with higher pregnancy rate and lower miscarriage rate (45% and 20%) when compared with G2 >40 years group (26% and 61%).

CONCLUSIONS: The increased pregnancy and implantation rates and a lower miscarriage rate were observed when using PGD and PGS for euploid embryo selection prior to transfer, particularly in the advanced maternal age group. Our findings suggest that patients older than 35 years could benefit from the use of PGS in order to select embryos with a higher implantation potential.

Supported by: None.

A-83

CERVICAL DILATATION IS NOT BENEFICIAL IN WOMEN WITH A FAILED DUMMY EMBRYO TRANSFER. H. Al-Inany, R. Mansour, G. Seror, M. Aboulghar. Cairo University, Cairo, Egypt; Egyptian IVF-ET Center, Cairo, Egypt.

OBJECTIVE: Dummy, or trial embryo transfer, prior to the actual transfer has been demonstrated as an excellent screening test to determine expected difficulty in women undergoing assisted reproduction (Mansour et al, 1990). We wished to determine the value of cervical dilatation in women with failure to traverse the cervix during a dummy transfer.

DESIGN: Prospective clinical trial.

MATERIALS AND METHODS: Fifty-six women undergoing ICSI were included who had experienced failure of the dummy transfer at the time of starting down-regulation and underwent cervical dilatation before starting ovarian stimulation. The selection criteria were: failure to do dummy embryo transfer due to extreme difficulty to insert two different soft catheters (Wallace Classic Embryo Transfer Catheter, and Cook Sydney IVF Embryo Transfer Catheter). Dilatation was considered complete when a no. 8 Hegar dilator could be easily introduced into the cervical canal. This cohort was matched with a random sample of 89 women from our database with similar demographic and cycle characteristics. An average of 2 embryos (2.83 vs. 2.96, P = 0.4) was transferred using one of the aforementioned catheters.

RESULTS: There were no significant differences in patient age (31.5 vs. 31.0, P = 0.58), number of oocytes retrieved (9.7 vs. 11.2, P = 0.12), number of cryopreserved embryos (2.1 vs. 1.9, P = 0.68) between the two groups. Embryo transfer was performed on average following 14.2 (2.1) days of ovarian stimulation. In the dilatation group, an easy transfer (defined as easy passage of Wallace catheter) was achieved in only 13 cases (23.21%) while 42 cases (75.00%) required the use of the Sydney IVF catheter, with a stylet. Complete failure to introduce the catheter happened in only one case (1.79%). A clinical pregnancy was achieved in only 14 cases (28.6%) which were almost half the reported pregnancy rate for our center during the same time period (47%). Even so, it is important to note that the pregnancy rate in the group who encountered difficulty during ET without cx dilatation was also low (35.3%) [O.R = 0.73, 95% CI = 0.34 to 1.53; P = 0.77.

CONCLUSIONS: Cervical dilatation prior to embryo transfer was not beneficial in women with a history of failed dummy embryo transfer. In addition, it should not be recommended as the optimum choice for women with difficulty during embryo transfer and other options should be investigated.

Supported by: None.

A-84

DOES LUTEAL PHASE VAGINAL PROGESTERONE (LP-P) SUPPLEMENTATION IN FIRST CLOMIPHENE CITRATE (CC)/INTRAUTERINE INSEMINATION (IUI) CYCLES CHANGE OUTCOME? M. Hemphill, E. B. Johnston-MacAnanny, D. B. Maier, C. A. Benadiva, D. W. Schmidt, J. C. Nulsen. Obstetrics and Gynecology, Division of REI, University of Connecticut Health Center, Farmington, CT.

OBJECTIVE: To determine if LP-P improves clinical pregnancy rates in first cycle of CC/IUI.

DESIGN: Retrospective chart review.

MATERIALS AND METHODS: Patients undergoing first cycles of CC/IUI from 1/2005-1/2007 were grouped by LP-P use based on provider practice pattern and included if ≥5 million total motile spermatozoa were inseminated and tubal patency assessment revealed at least one patent fallopian tube. Clinical pregnancy was the primary outcome measure. Clinical pregnancy loss rate, biochemical pregnancy rate and multiple gestation rates were calculated. Patients were excluded if baseline demographic data was not complete, follow-up data was not obtained or LP-P use could not be assessed. Chi square analysis and student t test were used.

RESULTS: Our findings demonstrate equivalent clinical pregnancy rate, clinical loss rate, biochemical pregnancy rate and multiple gestation rate between groups. More patients with male factor infertility and taking 100mg CC were present in Group 2 than Group 1 (9.8% vs. 0%) and (21.7% vs. 9.6%) respectively. The statistically significant small difference in number of years of infertility is unlikely to be clinically significant. Other baseline characteristics were not different between groups. No difference in clinical pregnancy rate was observed in treatment groups when subgroup analysis by diagnosis was performed. See Table 1 and Table 2.

TABLE 1. Baseline and Outcome data as means ± SD

	Group 1: LP-P (N=94)	Group 2: No LP-P (N=92)	p value
Age (yrs)	33.4±3.86	33.0±3.35	NS
Weight (lbs.)	165.5±49.2	155.7±43.2	NS
Years of infertility	1.79±1.57	2.36±1.35	0.016*
Clinical Pregnancy Rate % (N)	11.7 (11/94)	16.3 (15/92)	NS
Biochemical Pregnancy Rate % (N)	3.2 (3/94)	2.2 (2/92)	NS
Ongoing Pregnancy Rate % (N)	57.1 (8/14)	70.5 (12/17)	NS
Multiple Gestation Rate % (N)	9.1 (1/11)	0.0 (0/15)	NS