

IVF-ET. They were divided into two groups. Group 1 (30cycles) used metformin (metformin 500 mg three times or two times daily was orally taken from previous two mens cycles) and group 2 (25cycles) did not use metformin.

**Results:** The duration of ovulation induction in group1 was  $10.6 \pm 2.4$  days, which was significantly shorter than the  $13.4 \pm 2.6$  days in group 2 ( $p < 0.001$ ). Total doses of drugs was  $35.0 \pm 11.0$  ampules in group 1, which were also significantly less than  $41 \pm 12.0$  ampules in group 2 ( $p = 0.04$ ). There was no specific difference in the number of aspirated oocyte (group 1;  $10.4 \pm 4.7$  / group 2;  $10.0 \pm 4.1$ ), good quality embryo (group 1;  $4.7 \pm 2.2$  / group 2;  $4.2 \pm 2.7$ ) and the fertilization rate (group 1;  $63 \pm 1761 \pm 15.9\%$ ). The incidence of cycle cancellation due to poor ovulation response in group 2 was 3 (10.0%) and 0 (0%) in group1, but not statistically significant. Clinical pregnancy rate in group 1 (33.3%) was relatively higher in group 2 (25.9%), but not statistically significant.

**Conclusion:** In our study, metformin therapy in PCO patients undergoing IVF seems to improve ovarian response to stimulating drugs in the aspect of shorter duration of ovulation induction and lesser doses of drugs.

## O-17 Transcervical Embryoscopy: Useful Diagnostic Tool in Missed Abortion

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**Background & Objectives:** Approximately 15~20% of all clinically recognized pregnancies result in spontaneous abortion and 60~70% of these are attributable to detectable chromosome abnormalities. Although the incidence of first trimester losses is high, spontaneous abortion material is often poorly described from a development perspective. The purpose of this study was to determine the usefulness of transcervical embryoscopy in diagnosing localized and generalized defects in the embryonic morphogenesis of missed abortions. The embryoscopic findings are supplemented by the results of cytogenetic analysis in all cases.

**Method:** In this study, consisted of 22 women with the final diagnosis of missed abortion between August 1, 2003 and September 30, 2003 in Samsung Cheil Hospital. Prior to the instrumental evacuation of the uterus a rigid hysteroscope was passed transcervically into the amniotic cavity to obtain a detail view of the embryo. Karyotyping was done in all cases included in this study.

**Results:** Visualization of embryo or early fetus was successful in 20 cases. Among 20 examined cases, 16 cases had successful karyotype and as a result 6 (6/16, 37.5%) had abnormal karyotype. Among 16 cases which had successful karyope, 4 (4/16, 25%) had normal external features, 7 (7/16, 43.8%) had classified as growth-disorganized and 5 (5/16, 31.3%) had either isolated or multiple defects, including facial dysplasia, delayed limb development, facial fusion to chest, umbilical cyst, brownish discoloration of ventral part and increased nuchal thickness. Of the morphologically normal and growth-disorganized embryo in embryoscopic examination, only 2 (2/11, 18.2%) had a abnormal karyotype. In contrast, of the

morphologically abnormal embryo in embryoscopic examination, 4 (4/5, 80%) had a abnormal karyotype.

**Conclusions:** Transcervical embryoscopy permits visualization of the embryo in utero, unaffected by the damage usually caused by its instrumental evacuation or spontaneous passage. This technique can be a helpful tool for understanding human embryonic malformations and genetic counseling for parents. Furthermore, correlation of morphological and cytogenetic findings in spontaneous abortion specimens could provide the need of further evaluation for future pregnancies in couples which had fear of repeated abortions. But, more larger scaled controlled study is needed for widely use of transcervical embryoscopy in missed abortion.