에서도 실험군이 대조군에 비해 유의하게 높은 결과를 나타내어 사람의 시험관아기시술에서 실험군의 배양액 (DMEM-G½GP)이 vero cell과의 공배양을 통해 높은 임신결과를 유도할 수 있었다.

P-48 The Effect of High Serum Estradiol Concentration on Endometrial Receptivity in GnRH-antagonist Cycles

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Background & Objectives: There is general agreement about the poor IVF outcome in high responder patients compared with normal responder on controlled ovarian hyperstimulation (COH) with GnRH agonist (Pellicer et al., 1989a; Toner et al., 1991; Simon et al., 1995). This study was undertaken to investigate such an agreement on COH with GnRH-antagonist cycle, the effect of high serum estradiol concentration at the day of human chorionic gonadotropin (hCG) administration on endometrial receptivity in GnRHantagonist cycle.

Method: Retrospective controlled study. From January 2001 to September 2003, A total of 63 IVF- ET cycles which were performed COH with GnRH antagonist multidose protocol were divided into two groups according to the number of retrieved oocytes: high responder groups (23 cycles, 23 patients) in which more than 15 oocytes were retrieved and normal responder group (45 cycles, 44 patients) in which less than 14 oocytes were retrieved. IVF- ET cycles were divided into subgroups according to increasing estradiol concentration, regardness of high or normal responder. Clinical pregnancy rate (CPR), implanation rate (IR), live birth rate (LBR) were compared between two groups using Student t-test and chi-square. $p<0.05$ was considered as statistically significant.

Results: The number of retrieved oocyte (20.7±6.1 vs. 7.7±3.3, p=0.000) and serum estradiol concentration at the day of hCG administration (2392.3±1339.9 vs. 1470.5±919.3, p=0.001) were significantly higher in high responder than normal responder. There were no significant differences in the number of transferred embryo (4.0±0.6 vs. 3.6±0.9), endometrial thickness at the day of hCG administration (10.1± 3.0 vs. 9.1±2.0) between two groups. The CPR (39.1% vs. 48.9%), LBR (34.8% vs. 37.8%) and IR (17.2% vs. 19.6%) per embryo transfer was higher in normal responder but it shows no significant difference. There is a significant decrese in IR, 6.7% when estradiol concentrations are $\geq$ 3000 pg/ml.

Conclusions: There were no significant defference in CPR, IR and LBR between high and normal responder. But higher serum estradiol concentration at the day of hCG administration may have detrimental effect on uterine receptivity in COH with GnRH antagonist cycle.