

부위 (Cellular Fragment Portion, CFP)에 AH를 실시한 그룹 (135주기)과 빈난강부위 (Empty Perivitelline Space, EPS)에 AH를 실시한 그룹 (108주기)으로 나누었다 (Table 2). 산성 Tyrode solution은 pH가 2.6~2.8이었다. 착상률과 임신률의 비교는 Chi-square test를 이용하여 실시하였다.

결 과: 이상의 결과는 Table 1, 2에 요약하였다.

Table 1. Effect of AH in accordance with embryo quality on the implantation and pregnancy rates

	AH	No. of cycles	No. of embryos transferred	No.(%) of implantation	No.(%) of pregnancy
Group 1	-	99	502	88 (17.5)	42 (42.4)
	+	93	443	75 (16.5)	36 (38.7)
Group 2	-	908	908	64 (7.0)*	42 (16.3)*
	+	881	881	107 (12.1)*	66 (26.7)*

(*; p<0.01)

Table 2. Effect of AH portion on the implantation and pregnancy rates in poor quality embryos

AH portion	No. of cycles	No. of embryos transferred	No. (%) of implantation	No. (%) of pregnancy
EPS	110	348	29 (8.3)*	19 (17.3)*
CFP	137	533	78 (14.6)*	47 (34.3)*

(*; p<0.01)

수정란의 질이 양호한 경우에는 AH에 따른 착상률과 임신률의 향상효과가 없었던 반면 수정란의 질이 낮은 경우에는 AH에 따른 착상률과 임신률의 향상효과가 높게 나타났다 (Table 1; p<0.01). 또한, EPS 부위보다는 CFP부위에 AH를 실시했던 경우가 훨씬 높은 임신률과 착상률을 보였다 (Table 2; p<0.01).

결 론: 이상의 결과로 이루어 보아 산성 Tyrode solution을 이용한 AH은 수정란에 큰 피해를 주지 않으며 질이 낮은 수정란에서 실시할 때 착상률과 임신률의 향상에 크게 도움이 되는 것으로 사려된다. 특히 난세포 편절 부위에 AH를 실시함이 바람직할 것으로 사려된다.

P-15 Relationship between Basal FSH/LH Ratio and Ovarian Response in Controlled Ovarian Hyperstimulation

Jo MY(조미영), Kim MR, Hwang KJ, Ryu HS

Department of Obstetrics and Gynecology, Ajou University School of Medicine, Suwon, Korea

Objectives: To evaluate whether basal FSH/LH ratio in the presence of normal FSH can predict ovarian response in patients undergoing controlled ovarian hyperstimulation (COH).

Materials and Methods: We retrospectively reviewed the patients who underwent COH from January

2001 to December 2001. Patients with >40 years of FSH >12 mIU/ml were excluded. The patients were divided into 3 groups according to basal FSH/LH ratio: ratio < 1.0 (group 1), ratio $1.0 \geq$ and ≤ 2.0 (group 2), ratio > 2.0 (group 3). Cycles stimulated with combination of luteal suppression and prue FSH were included.

Results: Total 154 cycles were included on this study (43 cycles in group 1, 83 cycles in group 2, 28 cycles in group 3). Age, day of hCG, number of good embryos, implantation rate, clinical pregnancy rate and miscarriage rate were not different in 3 groups. Basal FSH was significantly higher in group 3 (basal FSH/LH ratio > 2). Basal LH level, total oocytes and good oocytes retrieved, fertilization rate, number of embryos transferred and cryopreserved were significantly lower in group 3.

Conclusions: Basal FSH/LH ratio with normal FSH have a significant relationship with ovarian response and fertilization rate. So we suggest elevated basal FSH/LH ratio can predict poor ovarian response but further evaluation is needed.

P-16 Major Factors Affecting the Outcome of in vitro Fertilization in Infertile Women Over 37 Years of Age

울산대학교 의과대학 서울아산병원 산부인과교실

오영미 · 이방현 · 채희동 · 김성훈 · 김정훈 · 강병문

Objectives: The purpose of this study was to evaluate what factors are major factors affecting the outcome of IVF treatment in infertile women over 37 years of age.

Materials & Methods: A retrospective study was performed in 204 patients (360 cycles) whose age was 37 years or more and undergo IVF-ET at Asan Medical Center from January, 1996 to June, 2002. The study population was divided in two groups according to IVF-ET outcome (pregnancy and non pregnancy). We evaluated data including patient age, husband age, etiology of infertility, previous conception history, prestimulation FSH level, endometrial thickness on HCG day, number of received ovum, number of fertilized ovum, cumulative embryo scores (CES), number of transferred embryo, clinical pregnancy rate, miscarriage rate.

Results: There were statistically significant difference in patient age (38 ± 1.2 vs 39.5 ± 2.5 years), husband age (38.4 ± 3.84 vs 42.6 ± 5.4 years), mean cumulative embryo scores (145 ± 84.1 vs 85.9 ± 59.3), number of embryo transferred (4.3 ± 1.7 vs 3.33 ± 1.7), number of received ovum (9.5 ± 5.0 vs 17 ± 5.6), number of fertilized ovum (4.6 ± 2.0 vs 3.5 ± 2.3 , $p < 0.05$). There were no statically significant difference in serum FSH level, etiology of infertility, previous conception history, endometrial thickness on HCG day. Using logistic regression, CES ($p < 0.05$, OR 1.014, 95% C.I.) and patient's age ($p < 0.05$, OR 0.695, 95% C.I.) were the only variables that affected pregnancy rates in patients over 37 years of age.

Conclusions: CES after adjustment of age affect the outcome of IVF-ET in patients over 37 years of age.