

0-15 자궁내막증 환자에서 에스트로겐 수용체 유전자 Dinucleotide Repeat 다형성 양상

서울대학교 의과대학 산부인과학교실¹, 의학연구원 인구의학연구소²,
병리학교실³, 전남대학교 의과대학 산부인과학교실⁴

황규리 · 최영민^{1,2} · 구승엽¹ · 오성택⁴ · 박성효¹ · 장은란¹ · 박노현¹
박인애³ · 전종관¹ · 서창석^{1,2} · 김석현^{1,2} · 김정구¹ · 문신용^{1,2}

Background & Objectives: 한국 여성에서 에스트로겐 수용체 유전자의 dinucleotide repeat 다형성과 자궁내막증의 연관성에 대하여 조사하고자 하였다.

Method: 수술 소견 또는 조직검사상 자궁내막증으로 진단된 161명의 여성을 환자군으로 하였으며, 복강경 검사 또는 개복술을 시행하였으나 자궁내막증의 증거를 발견할 수 없었던 145명을 대조군으로 하였다. 대상들에서 에스트로겐 수용체 유전자의 dinucleotide repeat 다형성 양상을 fluorescent PCR 및 gene scan analysis를 이용하여 조사하였다.

Results: 대상인에서 총 16개의 에스트로겐 수용체 유전자의 dinucleotide repeat 다형성 대립유전자가 발견되었다 (12~27 repeats). 자궁내막증 환자군에서 대립유전자들 (allele)의 분포는 대조군과 유의한 차이가 없었다. 그러나 자궁내막증 환자들을 stage I-II와 stage III-IV로 구분하여 분석하였을 때, 자궁내막증 stage I-II군 (52명)에서 낮은 반복횟수 (12~15 repeats) 대립유전자들의 빈도가 대조군보다 유의하게 높았다 (67.3% vs 53.8%, $p=0.017$). 반면 자궁내막증 stage III-IV군 (109명)에서 낮은 반복횟수 (12~15 repeats)의 대립유전자들의 빈도는 대조군과 차이가 없었다 (55.0% vs 53.8%).

Conclusions: 한국 여성에서 에스트로겐 수용체 유전자의 dinucleotide repeat 다형성은 경증의 자궁내막증 발생과 연관이 있었다.

0-16 Effect of Metformin During Controlled Ovarian Hyperstimulation (COH) in Patients with Polycystic Ovarian Syndrome (PCOS) Undergoing IVF-ET

KJ Hwang, HJ Choi, HS Chang, PJ Cho, YB Kim, MC Kim, YS Ahan,
NH Chae, HJ Lee, H Lee, YR Chang, SE Yeon

Deartment of Obstetrics and Gynecology, Grace Women's Hospital, Ilsan, Korea

Objective: To evaluate the effect of metformin with regard to ovulation induction characteristics, cycle parameters (number of oocyte, fertilization rate, transferred embryo quality) and outcome (pregnancy rate and cancellation rate) in PCO patients undergoing IVF-ET

Materials and Methods:

Design; Retrospective data analysis of selective groups of PCO patients.

Methods; From Jan 2000 to December 2002, 60 cycles with PCOS were selected under the criteria of typical ultrasound finding, chronic anovulation and increased LH or total testosterone level undergoing

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 ± 2.4 days, which was significantly shorter than the 13.4 ± 2.6 days in group 2 ($p < 0.001$). Total doses of drugs was 35.0 ± 11.0 ampules in group 1, which were also significantly less than 41 ± 12.0 ampules in group 2 ($p = 0.04$). There was no specific difference in the number of aspirated oocyte (group 1; 10.4 ± 4.7 / group 2; 10.0 ± 4.1), good quality embryo (group 1; 4.7 ± 2.2 / group 2; 4.2 ± 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

KM Yang, MY Kim, SH Lee, HJ Song, IS Kang, MK Goong

성균관대학교 의과대학, 삼성제일병원 산부인과, 생식내분비 및 불임분과

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