

로 차이가 없었다. hCG 투여일의 혈중 에스트라디올 농도는 각각 461.27 ± 361.51 pg/ml, 900.91 ± 560.94 pg/ml, 1099.55 ± 791.10 pg/ml으로 Group A가 Group C보다 유의하게 낮았다 ($p=0.001$). 임신율은 group A는 22.2%로 group B 17.1%와 group C 15.3%보다 높았으나 통계적인 차이는 없었다.

Conclusions: 과배란유도 및 인공수정에서 AI 병합요법은 CC 병합요법과 비교하여 임상결과에서 차이를 보이지 않았다. 하지만, 임신율이 높고 gonadotropin 사용량을 줄이고, 자궁내막의 두께가 호전되는 경향을 보이고 있어, CC 병합요법에서 얇은 자궁내막의 소견을 보이는 불임여성의 시술 시 AI 병합요법을 고려해볼 수 있겠다. 하지만, 앞으로 좀 더 많은 환자를 대상으로 하는 연구가 필요하겠다.

P-29 Factors Predicting Poor Ovarian Response in GnRH Antagonist Protocols: The More Factors, the Worse Outcome

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Objective: To evaluate the influence of the number of factors predicting poor ovarian response on IVF outcome in GnRH Antagonist protocols.

Materials and Methods: A total of 80 GnRH antagonist cycles which had at least one factor predicting poor ovarian response and did not have polycystic ovary on ultrasonographic examination between January 2003 and August 2006 were included in this study. The following factors were used for predicting poor ovarian response: patient age ≥ 39 years, day 3 serum FSH ≥ 10 mIU/mL, day 3 serum estradiol ≥ 70 pg/mL, serum estradiol on the day of hCG administration < 500 pg/ml, and previous poor ovarian response to ovarian stimulation (the number of oocytes retrieved ≤ 4). The mean age of the subjects was 37.8 ± 4.1 years (range: 27~46); the mean amount of gonadotropin used was 2986.7 ± 929.8 IU (range: 750~5400); and the mean number of oocytes obtained was 5.8 ± 4.0 (range: 0~16). Embryo transfer was performed in 73 cycles, and clinical pregnancy was confirmed in 9 cycles. Of the 80 cycles, 47 (Group I, 58.75%) had one predicting factor; 33 (Group II, 41.25%) had two or more factors. Statistical analysis was performed using Student's t-test.

Results: Significantly fewer oocytes were retrieved when there were more than one predicting factor (Group I, 7.2 ± 4.1 ; II, 3.8 ± 2.8 , $p < 0.001$). No statistically significant differences were observed in the mean amount of gonadotropins used (Group I, 2883.5 ± 969.4 ; II, 3138.3 ± 860.7 IU) and ultrasonographic endometrial thickness on the day of hCG administration between groups (Group I, 10.4 ± 2.1 ; II, 10.9 ± 2.42 mm). Clinical pregnancy rate in Group I was 10.6%, and in Group II was 12.1%, respectively, which did not have statistically significant difference.

Conclusions: A reduced ovarian response may be predicted better when there are more than one factor

predicting poor ovarian response in GnRH Antagonist protocols.

Key Words: Poor ovarian response, GnRH antagonist, Predicting factor, IVF

P-30 Diagnosis and Conservative Management of Uterine Arteriovenous Malformation: Case Report

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Background & Objectives: Uterine arteriovenous malformation (AVM) are rare entities, but potentially life-threatening condition. These lesions may be congenital or acquired. Most case are acquired and have resulted form previous uterine surgery or curettage, gestational trophoblastic disease, infection, endometrial or cervical cancer. Historically the diagnosis of uterine AVM was made at laparotomy or hysterectomy. Currently, color Doppler ultrasonography has been proposed for obtaining a reliable diagnosis. The authors have experienced a case of uterine AVM and successfully treated medical management. So we report this case with a review of the literatures.

Method: A 37-year-old woman, gravida 3, para 2, presented a vaginal bleeding. She had a persistent vaginal bleeding for 7 weeks after a artificial abortion at 13 weeks' gestation. She visited the local medical center in which the diagnosis was made as a remnant placenta tissue. However the vaginal bleeding became severe, she was referred for further evaluation to our hospital.

Results: When she was presented to our hospital, serum β -hCG was 11.5 mIU/mL, and hematocrit was 37%. Vaginal examination showed the slightly enlarged uterus and no adnexal mass, but vaginal bleeding was recognized. Transvaginal ultrasound demonstrated multiple anechogenic structures with intense, multi-directional, high velocity, low resistance vascular flow in the myometrium from right posterior wall to the fundus. To exclude other lesions, like hemangioma, malignacy of the uterus, infection, submucosal mass, CT with contrast enhancement was done and the result was consistent with the feature of AVM. Because she desired the further fertility and was hemodynamically stable, we decided to treat her with a conservative management. She was administered 0.2 mg of intramuscular methylergonovine and 0.5 mg/day of oral methylergometrine maleate for 7 days. Vaginal bleeding decreased soon after the intramusculat injection, and she was discharged the night of the day with no vaginal bleeding. One weeks later, she presented a scanty vaginal spotting. Transvaginal ultrasound revealed the size of the anechogenic structures with vascular flow in the myometrium was decreased. She was given only 0.5 mg/day of methylergometrine maleate orally for 7 days. After a period of 2 weeks, clinical and ultrasound follow-up was organized, she was asymptomatic and the lesion had disappeared at color Doppler ultrasonography. One month later, she is still asymptomatic.

Conclusions: Conservative management of uterine AVM is certainly a valuable option in the young patients who want to retain their fertility.