(p=0.182). Neither was the number of eggs that were retrieved from the diseased ovaries significantly different from contralateral normal ovaries (p=0.282).

**Conclusions:** Endometrioma cystectomy does not appear to reduce the ovarian response to COH for IVF.

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## O-14(임상) IVF Outcomes in Severe Endometriosis are Better than those in Mild Endometriosis

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**Background & Objectives:** To evaluate the impact of endometriosis on IVF-ET cycles and to compare IVF outcomes between stage I/II and stage III/IV endometriosis.

**Method:** We analyzed 697 patients (1199 cycles) with endometriosis (stage I-II: 638 cycles, stage III-IV: 561 cycles) and 325 pts (459 cycles) with tubal factor as controls between January 1994 and April 2004. Pts with endometriosis were diagnosed by laparoscopy and medical and surgical treatment were done in 353 cycles (55.3%) and 466 cycles (83.1%) of stage I-II/stage III-IV endometriosis. Cycles with age>35 years or FSH>20mIU/mL or severe male factor infertility were excluded.

**Results:** There was no significant difference in the mean age (years) in stage I-II /stage III-IV endometriosis and control (31.7±2.3 vs. 31.4±2.4 vs. 31.6±2.7). The number of retrieved oocytes (9.97±7.2 vs. 13.4±7.9 (p<0.0001)), total number of embryos (6.5±4.8 vs. 9.1±5.6 (p<0.0001)), and good quality embryos (2.43±1.6 vs. 2.74±1.7 (p=0.013)) significantly decreased in stage III-IV endometriosis than in control. But pregnancy rate of stage III-IV endometriosis was comparable with control (35.7 % vs. 36.8 %). Fertilization rate and number of total embryos were lower in stage I-II endometriosis than in control (64.8± 22.9 vs. 70.8±20.8 (p<0.0001), 7.6±5.0 vs. 9.1±5.6 (p<0.0001)). In patients with medical and surgical treatment of endometriosis, pregnancy rate and live birth rate was significantly lower in stage I-II than in stage III-IV endometriosis (29.2 vs. 36.2 (%), p=0.045, 23.9 vs. 31.5 (%), p=0.043). There was no difference in the mean age, but the duration of infertility was significantly longer (56.5±26.3 vs. 46.9±25.8 (mon), p<0.0001) and fertilization rate was lower (64.7±23.3 vs. 70.5±22.7 (%), p=0.001) in stage I-II than stage III-IV endometriosis.

**Conclusions:** Pregnancy rate and live birth rate in treated patients with stage I-II endometriosis is significantly lower than stage III-IV endometriosis. That might be related to lower fertilization rate and longer duration of infertility in milder endometriosis. Pregnancy rate and live birth rate in stage III-IV endometriosis are comparable with tubal factor infertility. We suggest that IVF should be considered earlier

in patients with minimal to mild endometriosis because of significantly decreased fertilization rates.

## O-15(임상) Transverse Vaginal Septum의 여성에서 Chiba Needle을 이용한 자궁내 정자주입에 의한 임신 성공

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**Background & Objectives:** Transverse vaginal septum같은 질-자궁 입구의 기형으로 정상적 부부관계에 의한 임신이 불가능하게 보이는 여성에서 배란시기에 맞추어 Chiba needle과 같은 긴 바늘을 이용하여 자궁 근육층을 통과하여 자궁강내에 정자를 직접 주입하는 방법으로 임신이 가능한지 여부를 알아보고자 하였다.

**Method:** Transverse vaginal septum이 있고 PCO (FSH 6.5 mIU/ml, LH 13.3 mIU/ml, PRL 10.8 ng/ml, E2 48.5 pg/ml)를 보이는 31세의 여성 환자에게 clomiphene citrate 100 mg과 IVF-M 75 IU로 배란유도를 두 차례 시행 하였으며 배란시에 Chiba needle을 이용하여 자궁내에 정자를 직접 주입하였으나 임신에 실패하였다. 세 번째 배란유도도 같은 방법으로 시행하였으며 MCD#16일에 초음파상에 난포 3개가 배란이 일어났으며 1개의 난포는 보조 배란술을 시행하였으며 Chiba needle로 준비된 정자 ($20\times10^6$ /ml, Motility 99%) 0.3 ml을 자궁내로 주입하였다.

**Results:** 자궁강내에 정자의 주입 후 3주 후에 임신을 확인하였으며 인공수정 후 5주째에 6개의 태낭을 확인 하였고 6개 중 5개의 태낭에서 심박동을 확인하였다. 임신 7주째 선택적 유산을 시행하여 2개의 건강한 태낭만을 보존하였다. 2006년 10월 26일 현재 임신 21주에 쌍태 임신을 유지하고 있다.

**Conclusions:** Transverse vaginal septum과 같은 질-자궁 입구 기형이 있을 때 Chiba needle을 이용하여 자궁 근육층을 통과하여 자궁강내로 정자를 주입하는 시술은 임신 시도에 좋은 대체 보조 생식술의 하나로 적용이 될 수 있다.

## O-16(기초) Mitochondrial DNA Copy Number in the Patients of PCOS

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**Background & Objectives:** The polycystic ovary syndrome (PCOS) is a common and complex endocrine