outcome. This may be due to increase the concentration of FSH and somatropin in early follicular phase with concomitant augmentation of angiogenesis by estrogen in the treated ovaries.

0-13(기초) Clinical Efficacy of Frozen-Thawed Embryo Transfer in Women with Endocrinologically Manipulated Endometrium with GnRHa

Joon Cheol Park, Jeong A Kim, Jin Gon Bae, So Jin Shin, Sang Hoon Kwon, Chi Heum Cho, Sung Do Yoon, Soon Do Cha, Jong In Kim, Jeong Ho Rhee

Department of Obstetrics and Gynecology, School of Medicine, Keimyung University, Daegu, Korea

Objectives: To investigate the clinical outcomes after frozen-thawed embryo transfer in artificially manipulated endometrial cycle and compare the treatment efficacy with fresh embryo transfer cycle.

Methods: Each 54 women who underwent first frozen-thawed embryo transfer and fresh embryo transfer in which at least 2 good quality embryos were transferred were collected successively as study group (group 1) and control group (group 2). We evaluated and compared the clinical outcomes including clinical pregnancy rate, implantation rate, abortion rate, on-going pregnancy rate between 2 groups. Statistical analysis was performed with student t-test and Chi square analysis and p<0.05 was considered as clinical significance.

Results: There were no significant difference in patient age, infertility duration, type, cause and quality of embryos transfered and baseline hormone profile except LH $(6.78\pm9.80 \text{ versus } 3.98\pm2.33)$, higher in group 1, p=0.046) between two groups. Clinical pregnancy rate, implantation rate, on-going pregnancy rate in group 1 and group 2 were 40.7% and 38.8%, 14.4% and 15.1%, 40.7% and 28.6%, respectively, there were no significant difference between 2 groups. Miscarriage rate in group 2 was 28.6%, significantly higher compared than 0% in group 1 (p=0.027).

Conclusion: Clinical outcomes after frozen-thawed embryo transfer in artificially manipulated endometrium with GnRHa were comparable to those in fresh embryo transfer cycle, so this protocol may be able to be at least as effective as fresh embryo transfer technique.

0-14(기초) 미성숙난자의 형태학적 지표와 체외성숙능과의 관계

문정희 1 · 지병철 1 · 한상훈 1 · 이정렬 1 · 장혜진 1 · 서창석 1,2 · 김석현 2

¹분당서울대병원 산부인과, ²서울대학교 의과대학 산부인과교실

Objectives: 미성숙난자의 체외성숙에 있어 난구세포의 양상 및 미성숙난자의 크기가 영향 인자로 작용하는 지를 알아보고자 하였다.

Methods: 2007년 1월부터 9월까지 체외수정시술을 위한 과배란유도 후 난자채취를 시행한 환자 중 18명의 환자에서 미성숙난자를 얻을 수 있었는데 이들에서 얻어진 33개의 germinal vesicle (GV) 단계의 미성숙난자를 대상으로 연구를 진행하였다. 미성숙난자는 먼저 난구세포의 양상을 다층난구세포 (multi-layered cumulus)와 단층난구세포 (single layered cumulus)로 나누어 기록하고 hyarulonidase를 처리하여 일괄 denudation을 시행하였다.