

O-14 Comparison of Efficacy in Various Surgical Approaches for Ovarian Endometrioma in IVF-ET Program

BH Lee, BK Lee, MH Park, KA Na, JH Lee, JA Im, HC Kwon

Division of Reproductive Endocrinology and Infertility, Department of Obstetrics and Gynecology, Major Women's Care Center (MWC)

Objectives: To compare COH characteristics and IVF outcome among IVF-ET patients who treated with various surgical approaches for ovarian endometrioma and to propose the effective therapeutic approach for improved outcome.

Materials and Methods: 155 patients treated with IVF-ET in this center between January 1997 to August 2003 were included in this study. 48 patients with tubal factor only were assigned to control group (group I). The remainder (N=107) had severe pelvic adhesion with endometrioma diagnosed by pelviscopy and were treated with GnRHa for 3months after pelviscopy, and then, therapy was stopped for 1 to 2months. The patients in group II (N=27) received only medical management with GnRHa. In the patients of group III (N=22), cyst aspiration just before COH was performed after pelviscopic window operation. The Patients in group IV (N=38) were treated by sclerotherapy with both dehydrated alcohol and 5% Doxycycline or Tetracycline after pelviscopic window operation. Cystectomy was performed in the patients of group V (N=20). For IVF-ET, conventional GnRH agonist long step-down regimen starting from midluteal phase was performed after basal FSH examination. Resistance index was measured on day administering hCG.

Results: As compared with group I, in group II (with both remnant ectopic endometrial tissues and space occupying lesion) RI ($p<0.05$) was significantly increased but E2 examined on day administering hCG, total number of oocyte, good quality oocyte rate (GQOR), fertilization rate (FR), cleavage rate (CR) and embryo development were significantly decreased ($p<0.05$). In group III (with remnant ectopic endometrial tissues) FR, CR and embryo development was significantly decreased ($p<0.05$) but RI, E2, total number of oocyte & GQOR were not significantly different. In group IV (with sclerotherapy) all parameters were not significantly different with group I. In group V (with ovarian parenchyma damaged by management) basal FSH, RI and gonadotropin ampoules were significantly increased ($p<0.05$) and E2, total number of oocyte, and GQOR were significantly decreased ($p<0.05$) but FR, CR and embryo development were not significantly different compared with control.

Conclusions: We concluded that endometrioma must be treated in women to try pregnancy and sclerotherapy was most effective among various therapeutic modalities. Further study on a large scale is necessary to identify effective clinical outcome of sclerotherapy.