

P-6 The Effects of Female Age on the Outcome of ICSI Cycles Using Fresh vs. Frozen-Thawed Testicular Sperm Extraction Spermatozoa in Poor Responders to Ovarian Stimulation

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Background & Objectives: To investigate the effect of age on IVF success in fresh vs. frozen-thawed TESE-ICSI in poor responders.

Method: Thirty-three poor responders whose partner underwent TESE-ICSI for obstructive azoospermia from January 2001 to July 2005 were retrospectively evaluated. The poor responder patients were divided into two groups: One group (n=14) had fresh TESE-ICSI and the other group (n=21) had frozen-thawed TESE-ICSI. Patients in each group were subdivided into ages of either younger or older than 40 years old. The testicular spermatozoa were provided for ICSI procedure. Cleaving embryos were transferred into the uterine cavity 72h after the ICSI procedure. The main outcomes of the study were fertilization, pregnancy and implantation rates.

Results: There were no differences between fresh and frozen-thawed groups in terms of age of patients, number of retrieved oocytes and number of transferred embryos. Fertilization rates for the women older than 40 years of age in fresh TESE-ICSI were significantly higher than those of older than 40 years in frozen-thawed TESE-ICSI. Although not statistically different, the pregnancy rates and implantation rates for the women younger than 40 years of age were higher than those of older than 40 years, regardless of fresh TESE-ICSI and frozen-thawed TESE-ICSI in poor responders.

Conclusions: The female age might be a major factor for determining successful implantation in fresh TESE-ICSI and frozen-thawed TESE-ICSI in poor responder patients.

P-7 Expression of Recombinant Survivin Protein and Its Protein Identifying in Bovine Embryo

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Background & Objectives: Survivin is a member of the inhibitor of apoptotic protein (IAP) containing a single BIR (baculoviral IAP repeat) domain and known as a bifunctional protein that suppresses apoptosis and regulates cell division. The aim of this study was to identify survivin protein in bovine embryo using antibody prepared from recombinant survivin protein.

Method: Survivin gene expression in bovine pre-implantation embryo was analyzed at all stages from day 1 to day 8. Messenger RNA was extracted using the Dynabeads mRNA Direct Kit and the survivin cDNA gene from bovine embryo was cloned by RT-PCR. We produced a recombinant bovine survivin protein corresponding to amino acid sequence 143 of the mature protein in *Escherichia coli*. And survivin protein was purified and injected into two rabbits to produce the antisera. Antibody production and titration were analyzed by dot and western blots. Also, the expression of survivin protein in bovine embryos was investigated by immunocytochemistry with rabbit anti-bovine survivin antibody.

Results: RT-PCR revealed that survivin mRNA was expressed in all stages of preimplantation embryos and the expression pattern was increased in later stage embryos. After third inoculation, survivin antibody titer (1;1,000) was sufficient to retrieve the sera and the antibody was proved specific both in dot and western blots. Expression level of survivin protein was similar to level of mRNA in all stage. Also, we confirmed the survivin protein was expressed in bovine embryos by immunocytochemistry.

Conclusions: This result demonstrated that survivin protein was expressed in bovine pre-implantation embryos and its distribution range can be indentified using survivin antibody.

P-8 Effects of Electro-acupuncture on the Estradiol Valerate-induced Polycystic Ovaries in Rats

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Background & Objectives: A form of polycystic ovary (PCO) resembling some aspects of the human PCO syndrome (PCOS) can be induced in rats by a single injection of estradiol valerate (EV). The PCOS still remains as one of the most common causes of anovulation in women of reproductive age. Therefore, seeking the pathogenesis of PCOS is important for controlling fertility. In traditional Oriental Medicine, acupuncture has been used for function of ovaries. Electro-acupuncture (EA) stimulation affect the female endocrine function. The present study was designed to evaluate if EA could affect the experimentally induced polycystic ovary (PCO) in the rat.

Method: Two acupoints of Samumgyo and Hangan were stimulated for the efficacy in the regulation of endocrine levels that is known to participate in the hypothalamic-pituitary-ovarian axis (HPOA) function. The administration of EA was done every other day for 30 and 60 days. The morphological changes of ovaries from EA treatment were compared to those from oil-treated control group and EV group at each days.

Results: PCO was fully developed in the rat with a single intramuscular injection of EV at 60 days. Significant development of the healthy growing follicle and corpus luteum was observed in EA group. Plasma progesterone and estradiol levels increased significantly in 8 weeks of treatment with EA. Insulin level was decreased EA group. The present study shows that EA might improve the dysfunction of HPOA in EV-induced rat with PCO.