

count of sperm in males, we can increase the chance of fertility and also delivery too.

Conclusion: ITM protocols can increase the ability of giving and taking between the couple, so the success in assisted fertility techniques will be increased clearly. It seems that research on the method open new horizons to help to increase the success of assisted fertility techniques.

Keywords: Temperament, Iranian Traditional Medicine, Infertility

P-169: Protective Effect of Vitamin E on Cypermethrin-Induced Damages Correlates with P53 Gene Expression and Nitrosative Stress

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Background: Because of fast rate of degradation and low mammalian cells toxicity the cypermethrin (CPM) is a wide used insecticide in domestic agriculture and in veterinary medicine applications. The compound exerts its pathological impact by down-regulating the antioxidant status. Therefore, current study was designed to evaluate the protective effect of vitamin E on CPM-induced apoptosis and nitrosative stress on ovarian tissue.

Materials and Methods: Eighteen Mature female rats were divided into three (N=6) test and control-sham groups. The animals in test group 1 received CPM (75 mg/kg) and in test group 2 received vitamin E (150 mg/kg) + CPM by gavages, for 24 constitutive days. The normal saline was administrated in control-sham group. After evaluating the total RNA content the P53 gene expression was evaluated by RT-PCR. The tissue total protein (TP), total antioxidant capacity (TAC) and nitric oxide (NO) were examined.

Results: Vitamin E administrated animals were manifested with significantly ($p < 0.05$) higher total RNA (3986.33 ± 24.79) and protein (3.25 ± 0.03) contents versus the CPM alone-administrated (1847.34 ± 19.94 for RNA and 2.79 ± 0.12 for protein) group. The P53 gene expression was detected in CPM alone group while it was not observed in vitamin E-administrated group. The vitamin E up-regulated TP and TAC and reduced NO level compared to CPM alone group.

Conclusion: Our data suggest that CPM impact the ovarian tissue by inducing the nitrosative stress which promotes the P53 gene which in turn leads to cellular apoptosis. On the other hand vitamin E by up-regulating antioxidant status inhibited the damages.

Keywords: Cypermethrin, P53, Nitrosative Stress, Total Antioxidant Capacity, Total Protein

P-170: Animal Models of Human Artificial Ovary, Valuable Tools for Fertility Preservation in Cancer Patients

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Background: With all the recent advances in cancer treatments, many young cancer patients find themselves facing the prospect of losing their fertility after aggressive chemotherapy or radiotherapy. Cryopreservation of ovarian cortical tissue has emerged as a potential option to restore fertility in these young women.

Materials and Methods: Because autotransplantation of cryopreserved ovarian cortex carries the risk of reintroducing cancer to the patient in remittance, xenotransplantation of frozen-thawed ovarian cortical tissue to immunodeficient animal hosts has been suggested as an alternative, whereby primordial follicles are activated in an immunocompromised animal model and after initial growth are transferred to an *in vitro* culture system. This approach eliminates the risk of cancer cell reintroduction, and in addition, the hitherto unaccomplished phase of primordial follicle culture is bypassed. This combination of *in vivo* transplantation and *in vitro* culture to trigger maturation of primordial follicles has already been achieved in mouse models.

Results: Several grafting techniques, including heterotopic or orthotopic, have been reported basically differing only in the location to which the ovarian grafts have been transplanted, such as the bursal cavity, the kidney capsule, and subcutaneous sites. Furthermore, several types of grafts have been reported, including xenotransplantation of human ovarian cortex or isolated primordial/ preantral follicles combined with extracellular matrix (artificial ovary) or without it, to immunodeficient mice.

Conclusion: Xenotransplantation of isolated primordial/ preantral follicles combined with extracellular matrix represents a valuable tool for the study of preantral follicular development and will continue as such as long as routine *in vitro* development of matured follicles derived from primordial follicles, which is unavailable for other species than the mouse. Given the low availability of human reproductive tissue for research purposes, animal models can offer interesting alternatives.

Keywords: Animal Model, Cancer, Fertility Preservation, Artificial Ovary

P-171: Expression of Vascular Endothelial Growth Factor Receptors In Endometriosis

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