94 Cryopreservation of mouse embryos; slow versus ultrarapid freezing.
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Ultrarapid freezing is simpler and less expensive than other methods. So,we compared two different methods(slow and ultrarapid) for freezing of mouse embryos at various stage. mouse embryos were frozen using ultrarapid method in 3.5M DMSO+0.25M sucrose.After a brief exposure to the cryoprotec -tant,they were directly plunged into Liquid Nitrogen. Thawing was done at 37°C and the cryoprotectant was rapidly removed in one step dilution. Mouse embryos were slowly cooled in a programmed freezer using 1.5M PROH as cryoprotectant. Thawing was done at room temperature and PROH was removed by multi-step dilutions. Ultrarapid freezing resulted in rates of post-thaw survival and development to blastocysts of 85.7 and 45.3%(Zygotes),76.8 and 69.8%(2-cell stages) respectively.
Slow,programmed freezing resulted in similar rates of survival and development of 89.0 and 59.2%(Zygotes),79.1 and 64.1%(2-cell stages) respectively.
In conclusion,ultrarapid freezing with 3.5M DMSO is as effective as slow freezing with 1.5M PROH,as evaluated by their subsequent development in vitro.

95 Fluctuations in the Blood Prolactin Levels and TRH Loading Test Classified According to Ovarian Stimulation Methods in in Vitro Fertilization and Embryo Transfer
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We studied the effects of transient hyperprolactinemia, which occurs during ovarian stimulation in IVF-ET, on the ova and endocrinological dynamics. The subjects were tubal factor 19, male factor 3, and unexplained 19. The method of stimulation was clomid in 22, hMG in 44 and Buserelin in 24 for a total of 90 cycles in 68 cases. The blood E_2, P, LH, FSH and PRL levels were determined by RIA before hyperstimulation, at the time of hCG injection as well as at the OPU, in the mild luteal phase; we conducted TRH tests on the 11 cases in the high PRL level group ≧25.7 ng/mℓ at the time of hCG injection and on the 9 cases in the group <25.7 ng/mℓ. Due to ovary stimulation, the blood PRL reached its peak during injection of hCG, but when it reaches its maximum level during the hMG period, the dynamics differ depending on the stimulation method. No difference was observed in the fertilization and cleavage rates between the high PRL group and the normal group. During the TRH test, 5 out of 11 patients in the high PRL level group displayed abnormally high values, and they showed a similar response as occult hyperprolactinemia.

96 Does progesterone(P) rise during ovarian hyperstimulation with or without combined GnRH analog influence the outcome of in vitro fertilization?
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In order to investigate the impact of the rise in serum P level (1.0 ～2.0ng/ml) during the late follicular phase on the outcome of IVF-ET, we analysed hormonal data (E2,P,LH) and results of IVF-ET in 155 cycles of 78 patients. Three types of regimens were used for ovarian stimulation (Standard regimen; SR, Flare regimen; FR, Midluteal regimen; MR). The P rise occurred frequently during the late follicular phase (22.4% in SR, 43.5% in FR, 30.0% in MR). High concentration of serum E2, indicating increasing number of follicles, was closely related to the P rise. Fertilization rates in the cycle with the P rise were significantly lower than those in the cycle without P rise. Although the differences in pregnancy rate were not significant between the cycle with and without P rise, all ongoing pregnancies (11/21) occurred in the cycle without P rise. These results indicate that the P rise during the follicular phase influences not only the quality of oocytes but also establishing successful pregnancy.