

67 The Relationship Between Day of Initial Estradiol Rise and Results of In Vitro Fertilization and Embryo Transfer Cycles Stimulated with GnRH_a-hMG-hCG. S.Minami, S.Murayama, T.Kagawa, S.Yamano, T.Aono. Dept. Obst. and Gynec., Univ. Tokushima. Sch. Med. Tokushima.

48 patients (59 cycles) with irreparable tubal damage were stimulated with GnRH_a-hMG-hCG (long term method) for IVF-ET. Relationship among day of initial estradiol(E₂) rise, duration of E₂ rise and results of IVF-ET was studied. The day of initial E₂ rise means the day on which serum E₂ level reached 170pg/ml(Mean+2SD of serum E₂ level on day 3 of cycle). The duration of E₂ rise is the duration between the day of initial E₂ rise and the day of hCG injection. The pregnancy rate in the cycles in which the day of initial E₂ rise was between day 6 and 8 was significantly higher than that in the cycles in which the day of initial E₂ rise was between day 3 and 5 (37.0% vs 6.9%, p<0.01). There was no significant differences in serum FSH and LH levels between the two groups. The pregnancy rates were 33.3%, 27.3%, 26.4%, and 21.4% when the durations of E₂ rise were 4, 5, 6 and 7 days respectively. But there was no pregnancy when the duration of E₂ rise was 8 days and more. These results suggest that follicle and oocyte may need appropriate duration to achieve normal development.

68 Analysis of hormonal data in the cycle with the adjuvant use of GnRH analog(GnRH_a) for IVF-ET and GIFT programs. A.Sekijima, T.Iwabe, M.Tanikawa, M.Onohara, H.Terado, T.Toda, T.Harada, Y.Mio, N.Terakawa, Dept.Obst.and Gynec.,Tottori Univ.Sch.Med.,Tottori.

In order to investigate the effect of the adjuvant use of GnRH_a for ovarian stimulation on the outcome of IVF-ET and GIFT programs, we analysed hormonal data and the results of IVF-ET and GIFT programs. Three types of regimens(Standard;SR, Flare;FR, Mid-luteal regimen;MR) were used for ovarian stimulation. Serum level of E₂, P and LH were measured by RIA and EIA from day 3 to the day of ET. Transvaginal ultrasonography was done on alternate days beginning on day 7. The cancellation rate was not reduced in FR and MR. Although the frequency of an LH surge significantly decreased in FR and MR, P rise(1.0~2.0ng/ml) frequently occurred. High level of serum E₂ associated with excess number of follicles was closely related to P rise. The rate of fertilization and pregnancy were lower in the cycle with P rise than those without P rise. These results indicate that serum level of P, irrespective of the regimen for ovarian stimulation, is an important factor for establishing pregnancy in IVF-ET and GIFT programs.

69 Important hormonal factors which suggest pregnancy in GnRH analogue/HMG-stimulated IVF cycles. Y.Morimoto,Y.Horikoshi*,H.Kuwana,S.Makino, T.Morimoto,I.Sawaragi*,S.Sawaragi*, Infertility Centre, Kawachi General Hosp., Osaka, *Dept. Obst. and Gynec., Kansai Med. Univ. Sch. Med., Osaka

Estradiol (E₂), E₂/follicle, E₂/follicle/progesterone (P₄), P₄ and luteinising hormone (LH) were studied to select the important factors which suggest pregnancy under selective hypophysectomy with GnRH analogue. Each factors were measured daily from 4 days before ovum pick up (Day -4) to 4 days after ovum pick up (Day +4) in 42 cycles. 42 cycles were allocated into three groups: Group PREG (6 cycles), group of pregnancy. Group HIGH (11 cycle), not pregnant, fertilization rate≥50%. Group LOW (25 cycle), not pregnant, fertilization rate<50%. There were no significance between three groups in total dose of HMG, duration of HMG administration, number of follicles and E₂/follicle. E₂ elevated mostly in Day -2 in Group PREG, but in Day -1 in Group HIGH and LOW. The values of E₂ from Day -4 to 0, P₄ in Day +4, E₂/follicle/P₄ in Day 0 and LH in Day -4, -2, 0 suggested pregnancy. This study demonstrates which data in which day should be noticed for success.