

64 Studies on changes of number of motile sperm in the oviduct relative to time after various artificial inseminations (AI). K.Kamei, Y.Tamaoka, Y.Oshiba, N.Yoshida, T.Yokokura, H.Nakamura, Dept. Obst. and Gynec., Saisei-kai Central Hosp., Tokyo.

It would seem to be most useful to know the movement of motile sperm in the oviduct with regard to treatment of infertility, particularly various AIs. We divided subjects consisted of 72 women of unexplained infertility into 4 groups: I, AI into the vagina with raw semen (n=29); II, AI into the uterine cavity with sperm obtained by wash & swim-up (n=18); III, AI into the uterine cavity with Percoll-processed sperm (n=19); IV, AI into the cul-de-sac with Percoll-processed sperm (n=6). At 1 to 24 hours after AI at ovulation tubal flushings were obtained under laparoscopy with catheterization of the ampulla, and were subjected to determination of the number of motile sperm under phase-contrast microscope. We found only 2-4 motile sperm, 4.5-6 hours after AI of 3 patients in group I; 21-78 motile sperm, 1-3 hours after AI of 11 patients in group II; 36-102 motile sperm, 1-5 hours after AI of 10 patients in group III; 25-49 motile sperm, 1-3 hours after AI of 4 patients in group IV. The data suggest that the number of motile sperm in the oviduct reaches the largest, 1) 4-6 hours after NI, but it is very small, 2) 1-3 hours after intrauterine or intraperitoneal insemination.

65 Predictive value of hormonal profiles in early stimulation cycle of in vitro fertilization and embryo transfer H.SHINOZAKI, M.SEKI, K.TUCHIYA, M.ITOH, T.TAKEUCHI, I.ITOH, K.YAMADA, K.HASEGAWA, Y.IBUKI, M.IGARASHI, Dept. Obst. and Gyne., Gunma Univ., Sch. Med., Maebashi.

The purpose of this study was to evaluate the prognostic value of the estradiol, FSH, and inhibin response to agonist action of GnRH analog. One hundred and eighty in vitro fertilization-stimulated cycles were analyzed with estradiol, FSH and inhibin assayed by RIA. Estradiol on day2 and day3 were correlated with multiple follicular development and number of retrieved oocytes. But there were no correlation between FSH in the early follicular phase and the number of follicular development and the number of retrieved oocyte. High level of inhibin on day2 on day3 had also good correlation with the number of follicular development and number of the retrieved oocytes. In pregnancy group, estradiol on day2 level decreased promptly on day3, so day2/day3 was higher than non pregnancy group. We conclude that early estradiol response pattern to GnRH analog and the basal level of inhibin are the important early prognostic indicators of IVF outcome.

66 The effect of combination treatment of GnRH agonist and pure FSH for ovulation induction in patients with polycystic ovary syndrome. T.Matsuzaki, Y.Yokoyama, H.Ikawa, S.Saito, T.Ueda, T.Yasui, T.Miyake, M.Irahara and T.Aono, Dept. Obst. and Gynec., Univ. Tokushima Sch. Med., Tokushima.

We studied the effects of combination treatment of GnRH agonist (GnRHa) and pure FSH for induction of ovulation in patients with PCOS who did not respond to clomiphene citrate. Pure FSH alone treatment (150 IU/day, daily i.m. from the day 4-6 of menstrual cycle) was performed in 14 patients with PCOS in 35 cycles and combination treatment of GnRHa (900 µg/day, daily p.n. from the day 1 of menstrual cycle) and pure FSH (150 IU/day, daily i.m. from the day 15 of menstrual cycle) in 9 patients with PCOS in 27 cycles. There were no significant differences between both treatment in the ovulation rate per cycle (FSH; 74.3%, combination; 88.9%), the pregnancy rate per cycle (FSH; 17.1%, combination; 18.5%), the mean total dose of FSH and the mean number of developing follicles. The rate of OHSS per cycle in the combination cycle (11.1%) tended to be lower than that in the FSH cycle (20.0%). The mean LH/FSH rate on the last day of pure FSH administration in the combination cycle was lower than that in the FSH cycle.

These results indicate that the combination treatment of GnRH agonist and pure FSH may be useful for ovulation induction in patients with PCOS.