61 Preliminary results on hysteroscopic gamete intrafallopian transfer (GIFT), pronuclear stage tubal transfer (PROST) and tubal embryo stage transfer (TEST). H. Tamura, M. Saeki, K. Harada, T. Yamada, S. Yokozeki, Y. Nakata, Kyoto First Red Cross Hosp., Kyoto.

Outpatient tubal gamete or embryo transfer has the potential advantage over laparoscopic direct procedures. Since April 1st to Dec. 31st, 1990, 5 cases/11 cycles were enrolled in the hysteroscopic GIFT program using a flexible hysterofiberscope or a rigid hysteroscope. By the same ways we performed PROST and TEST to 3 cases/ 3 cycles respectively. In other 2 cases we failed to achieve fallopian catheterization. The indication for these programs were endometriosis (n=3), male factor (n=3) and unexplained infertility (n=1). Uterine cavity was distended with CO_2 and transcervical catheterization was performed with a 3 french Teflon catheter. Up to 3 embryos or 3 eggs with spermatozoa in 50 μl of medium were transferred into the fallopian tube 1 cm from ostia. We obtained 3 pregnancies with hysteroscopic GIFT but all were aborted. With PROST or TEST no one conceived. The hysteroscopic tubal catheterization definitely reduces psychological and physical stress for the patient compared with laparoscopic one. But the high wastage rate, which may be attributed to the intrauterine and tubal changes in the milieu due to continuous CO_2 flow, is the problem to be considered.

62 Evaluation of pregnancy rates within sperm preparation using various washing technique, and a randomized controlled analysis of PSRT. K.Kobanawa K.Mathumoto, K.Kobanawa, Dept. Obst. and Gynec., Tamari medical Kobanawa Hospital., Ibaraki.

All couples presenting to the Reproductive service of the Tamari, medical center between August 1989 and December 1990 were considered for this study. Only those couples with 2 or more years of infertility, an apparently normal female and male with a significant degree of oligoasthenozoospermia with culture-negative semen, were included. The sperm and semen criteria for 7 selections are follow. (A from G). A.sperm concentration > 50 million/ml, Motility > 60% B:S.C. < 50 million/ml and >20 million/ml, Motility > 60% C:S.C. <20 million/ml and > 10 million/ml, Motility > 60% D:S.C <10 million/ml, Motility < 60% E:Motility <30%, on reference sperm concentration. F:semen > 50% or more the other type of cells content G:high viscositysemen. Each selection's sperm were preparationed using 5 washing methods by the follow. ① Simple wash by GPM ②Monolayer Percoll ③ multiple layer Percoll ④The continuous-step Density Gradient ⑤Swim-down by Rotho PSRT was done by puncture of Douglas or laparoscopy. In the present study, we evaluated sperm motility before and after washing and statistical analysis was performed with analysis of variance.

63 Analysis of sperm transport with infertile patients with AIH-failure.

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Sperm recovery from the peritoneal fluid is unequivocal evidence of successful sperm transport to the site of fertilization. In the present study, we attemped peritoneal sperm recovery from 189 infertile patients with AIH failure (at least 10 attempts at AIH) as determined by diagnostic laparoscopy after intrauterine insemination. The overall sperm recovery rates from the peritoneal cavity (PF) and tubal washing fluid (TWF) were 86.8% and 91.0%, respectively. Of 92 normozoospermic mates, Sperm were recovered in the PF in 84 (91.3%) patients and in the TWF in 91 (98.9%) patients. Of 47 oligozoospermic mates, the sperm recovery rates were 82.0% in PF and 80.0% in TWF. There was a statistically significant difference between the TWF sperm recovery rates of oligozoospermic mates and normozoospermic mates ($P<0.001$). The motile sperm recovery rates were 94.6% for the normozoospermic group and 80.0% for the oligozoospermic group with no significant difference. However, there was no difference between the sperm transport results in the AIH failure infertile patients and the results in the total infertile patients.