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127 The Histologic Evaluation and Treatment of Occlusion of the Tubal Pars Interstitialis -Tubo Uterine Anastomosis-<u>Y.Yamada, H.Osada, Y.Hayakawa</u>, <u>K.Akamine, H.Nakamura, K.Tsubata, S.Takagi, K.Satoh</u>, Dept. of Obst. and Gynec., Nihon Univ. Sch. Med., Tokyo

Infertility in women is said to be 30 to 40 percent due to tubal factors. The treatment of tubal infertility includes tuboplasty with microsurgery and IVF&ET, however many problems remain regardless of the modality chosen. On the other hand, radical surgery may be applied to the interstitial occlusion by the use of microsurgery. Tubo uterine anastomosis involves creating an incision in the uterine wall, completely excising the occluded tubocornual portion, then accurately anastomosing the healthy tubal stump directly to the endometrium using a microscope. We found various patterns when we classified in descending order of occurrence, fibrosis most frequent in 39 cases 49% of the 81 specimens examined, on down through endometriosis, 17 cases, 22% and salpingitis isthmica nodosa, 8 cases, 8%, chronic inflammatory disease 11 cases, 16%. Over the past 9 years, we have reestablished tubal patency in 312 patients by microsurgery, and have been able to succeed in a pregnancy rate of 45%. Out of these, tubouterine anastomosis was performed in 86 cases, 82 cases, 95% have confirmed tubal patency and 50 cases, 58% have conceived.

128 Evaluation of human sperm acrosome reaction of frozen semen using triple stain technique. <u>K. Hayashi, N. Harima, K. Fuyuno, J. Nobutani,</u> Dept. Obst. and Gynec., Simonoseki National Hosp., Yamaguchi.

Triple stain technique was used to evaluate the time course of the acrosome reaction rate of human sperm in frozen semen. The acrosome reaction rate of human sperm was investigated by triple stain technque at each time 2 hr, 4 hr, 6 hr, 8 hr, 12 hr, 24 hr after human semen cryopreservation. It showed almost no change $(10\% \sim 13\%)$ in comparison with before cryopreservation. As a result, cryopreservation has almost no influence of the acrosome reaction rate of human sperm. These results suggest it is pertinent for treatment of infertile couple (especially, when male factors were adomitted) to use cryopreserved human sperm.

129 Variability in the sperm penetration rate in the hamster egg test during a year. <u>K.Ueda, N.Miharu, O.Samura, M.Kinutani, K.Ohama, A.Fujiwara</u>, Dept.Obst.Gynec., Hiroshima Univ.School of Med., Hiroshima.

Dept.Obst.Gynec., Hiroshima Univ.School of Med., Hiroshima. Variability in the results of the hamster test in healthy men during a one year period was determined. Nine young men were subjects of the present study. A liquefied semen sample was divided into two portions; one was treated with calcium ionophore A23187 before the spermatozoa were preincubated in mBWW medium (treated spermatozoa), and the other was processed for preincubation without treatment (untreated spermatozoa). During the one year period, six to eight analyses were performed for each donor. There was no correlation between any of the semen parameters and the sperm penetration rate (SPR). Among the donors, the mean SPR ranged ranged from 12.1 to 76.7 in a donor and from 68.9 to 97.0 for untreated and treated spermatozoa, respectively. The variability in the SPR of untreated spermatozoa in a donor [the highest SPR(%) - the lowest SPR (%)] was less than 25 in one donors, 25 to 49 in four donors and 50 to 75 in four donors. The variability in the SPR of treated spermatozoa in a donor was less than 25 in two donors, 25 to 49 in three donors and 50 to 75 in four donors. The variability in the SPR of treated spermatozoa in a donor was less than a stable value within a man.

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