

55 Effect of dietary supplementation with eicosapentaenoic acid on surgically induced endometriosis in the rabbit. Y. Yano, M. Morita, K. Ohtaka, E. Kojima, G. Ohmura, K. Momose, H. Nonaka*, 1st Dept. Obst. and Gynec., Toho Univ. Sch. Med., Tokyo, *1st Dept. of Pathology.

The effect of oral administration of pure eicosapentaenoic acid (EPA) on endometriosis was studied. The authors supplemented the diet of Japanese white rabbits with EPA (100mg/kg/day) (experimental group) or with 5% gum arabia solution (control). Endometriosis was surgically induced using a previously described experimental technique. In experimental group, following the treatment, EPA levels in plasma and peritoneal fluid increased significantly ($p < 0.001$), but no difference was seen in arachidonic acid (AA) levels. Peritoneal fluid prostaglandin (PG)E₂ and interleukin (IL)-1 β concentrations increased significantly after induction of endometriosis in control group ($p < 0.05$). In contrast, PGE₂ and IL-1 β levels were not significantly changed after endometrial implantation in the experimental group. Peritoneal fluid PGF₂ α concentrations after induction of endometriosis were higher than those before induction in control group, but not significant. The findings of the present study suggest that EPA can decrease intraperitoneal PGE₂ and IL-1 β production in patients with endometriosis.

56 Hysteroscopic evaluation of endometrium before IVF-ET. K. Inafuku, T. Sakumoto, M. Sakugawa, M. Arasaki, M. Higashi, M. Nakayama. Dept. Obst. and Gynec., Sch. of Med., Univ. of the Ryukyus., Okinawa.

65 cases who planned to IVF-ET were evaluated by hysteroscopy in previous midluteal phase. In 34 cases, some abnormality was observed. These abnormality include, functional abnormality (25 cases), endometrial polyp (5 cases), submucosal myomas (2 cases), endometrial hyperplasia (1 case), intrauterine synechia (1 case). Pregnancy rate by IVF-ET with normal hysteroscopic finding is 36%, and 13% with abnormality ($P < 0.05$). Hysteroscopy is valuable tool for evaluation of endometrium of the patient planned to IVF-ET.

57 An embryo-suppressing factor in endometriosis peritoneal fluid: measurement of its potency and correlation with clinical parameters. Y. Takeda, N. Nakahashi, H. Kitagawa, H. Suginami, S. Matsuura, Dept. Obst. and Gynec., Ehime Univ. Sch. Med., Ehime

Endometriosis (EM) peritoneal fluid (PF) is reported to contain a factor suppressing in vitro development of mouse 2-cell embryos (an embryo-suppressing factor; ESF). In this study, ESF relative potencies (RP) were measured in EM-PF by a method using PF from the follicular phase women of normal pelvis as standard. In EM ($n = 31$), ESF-RP were 1.96 (1.72-2.27) (the log-arithmetic mean and the 95% confidence interval of the mean in the parentheses), being higher than 1 ($p < 0.01$). ESF-RP did not differ between the R-AFS stages; 1.87 [1.55-2.25] for stage I ($n = 16$), 2.46 [1.74-3.45] for stage II ($n = 9$), 1.80 [0.81-4.01] for stage III ($n = 3$), 1.54 [1.07-2.21] for stage IV ($n = 3$). ESF-RP were 2.56 [1.90-3.44] in women with active endometriotic foci ($n = 11$) and 1.74 [1.48-2.03] in the counterparts ($n = 14$), the former being higher than the latter ($p < 0.05$). ESF-RP were 1.33 [1.13-1.55] for the subfertile ($n = 6$) and 2.37 [2.00-2.80] for the infertile EM women ($n = 19$), being lower in the former ($p < 0.01$). ESF may be a causing factor of endometriosis-associated infertility.