As a result, the average basal levels of FSH, LH, E₂ and P in the patient group were significantly lower, but those of PRL and C were higher than in the control group. The average basal levels of TSH, ACTH, T₃ and T₄ in the patient group were equivalent to those in the control group. Furthermore, there were far less response of the FSH and LH secretion to the LH-RH test, and far more response of the PRL secretion to the TRH test in the patient group. The increase of the TSH level in the latter test was similar in both groups.

55. Recommended Duration of Psedopregnancy Therapy for External Endometriosis (Endometriosis)

H. HASEGAWA, K. WATANABE, N. OOTSUKA, Y. TANAKA, R. IKEDA, A. FUJIMOTO, H. HIRAI, M. UEKI and O. SUGIMOTO

Dept. Obst. & Gynec., Osaka Med. College, Osaka

T. SANO

Takatsuki Red Cross Hosp., Osaka

Pseudopregnancy thrapy is one of the significant methods for palliative regimen of endometriosis with sterility. We made a following study to elucidate the period most suitable for pseudopregnancy therapy. The subjects were 120 patients with endometriosis who received pseudopregnancy therapy orally for 2-14 months.

Electron microscopy revealed nuclear malformation in gland cells of the lesion and expansion of endoplasmic reticulum, increase of degenerated mitochondria and lysosome in stroma cells of the lesion. Degeneration, necrosis and fibrination of the lesion became remarkable after 6-8 months, though necrosis did not completely prevail even after one year treatment. It seemed that internal endometriosis was less improved than external endometriosis. Degenerated primordial follicle increased apparently after medication of 10 months or more.

An increase of platelet count, a shortening of PT and PTT, and a decrease of anti T III, fibrinogen and antiplasmin were observed after three-month medication, which resuted in hypercoagulability and secondary fibrinolysis. GOT and GPT (over 100 u/l) rised in 16% cases who undertook the

treatment for over 8 months, but they were restored to the former level two to three weeks after the cassation of the treatment.

56. Electron Microscopic Studies of Cortical Stroma Cells of Human Ovaries

M. Yoshida, M. Murakami, K. Ushimaru, T. Nakano, K. Ko, H. Nakajima, T. Ishimaru, S. Miura and T. Yamabe

Dept. Obst. & Gynec., Nagasaki Univ. Sch. Med., Nagasaki

Whether or not the cortical stroma cells are correlated to the endocrine mechanism of human ovaries is of great importance, but has hardly been clarified to date. Electron microscopic studies have been made in the present report on the ovaries of 21 cases in proliferative stage, 14 cases in secretory stage, 17 cases in pregnancy, and 6 cases in climacteric and senile stages. Ten cases with PCO were also examined to know the influences of LH upon interstitial cells. For observation, HCG loading was made in vivo upon 3 cases and in vitro upon 20 cases out of those with normal ovaries. Cells at proliferative stage were small and looked like those cells in the mesenchymal system, while the cells were larger with development of cytoplasm at secretory stage. These changes were even more remarkable in pregnancy. The cells with PCO bore resemblance to thecal cells, and some of them in groups indicated luteinization. Changes implying morphological differentiation such as developments of organelles were noted with HCG loading. Following loading of HCG, c-AMP and E2 in the interstitial components respectively increased from 0.3 up to 1.7n mol/g and from 13.6 up to 20.3 ng/g. From the above findings, it can be deemed possible that the interstitial cells undergo functional as well as morphological changes and are correlated to ovarian endocrine mechanism.

57. Ovulation and Ovarian Blood Flow

S. MAKINODA, T. KUTSUZAWA, S. FUJIMOTO and K. ICHINOE

Dept. Obst. & Gynec., Sch. Med. Hokkaido Univ., Sapporo

T. KOYAMA