145 hCG AS STIMULATOR FOR TRANCSIENT HYPERTHYROXIEMIA WITHIN EARLY GESTATION. T.Tanaka, S.Tanaka, I.Furuta, M.Hayashi, S.Fujimoto, Department of Obstetrics and Gynecology, Hokkaido University School of Medicine.

Several lines of evidences have suggested that hCG, that is present in high concentration in the blood and urine of pregnant women, is the thyroid stimulator. The aim of this study is to confirm it clinically by examining the relationship between hCG and thyroid functions in women with either normal pregnancy or transient elevation of free T4 (FT4) which we have categorised as gestational transient hyperthyroxinemia (GTH). GTH was observed in 29 cases of 10,556 with normal pregnancy (incidence; 0.27%). Serun levels of FT4 (3.05+0.15ng/dl, M+se, n=29) and hCG (191.6+13.2mIU, n=219) in women with GTH were significantly ($p<0.001$) higher than those in women with normal pregnancy. FT4 concentrations were prositiveiy correlated with hCG concentrations ($r=0.5250$, $p<0.01$) GTH occurred within the early gestation, and then FT4 concentrations returned to normal levels with the progress of gestation. These results suggest that the trnsition in FT4 concentrations during the early gestation is consistent with the one of hCG concentrations supporting the thyrotropic actions of hCG.

146 Benadrostin: an inhibitor of poly(ADP-ribose) polymelase: its blocking effect on abortion in SLE prone MRL/1pr mice. S.Yamauchi, M.Aoki, M.Nagao, M.Murae, S.Isonishi, E.Kimura*, M.Yasuda, Y.Kanai**, Y.Terashima, Dept.Ob. and Gy., Jikei Univ.Sch.Med., *UCSD., **Dept.Molec.Oncol., Inst.Med.Sci., Univ.Tokyo, Tokyo.

Anti Poly(ADP-ribose)antibody, that is naturally produced in MRL/Mp-lpr/lpr (MRL/l)mice same as in human systemic lupus erythematosus (SLE), was suppressed selectively by Benadrostin administration. Benadrostin is a potent inhibitor of poly(ADP-ribose)polymelase.

By administration of Benadrostin before mating until early pregnant period of MRL/l mice, the increase of anti-poly(ADP-ribose) antibody was not seen and litter size was higher than control group. Thus Benadrostin may have the possibility to be an effective drug for fetal loss in SLE mice and human SLE.

147 Localization of immunoreactivity for inhibin/activin subunits in human corpora lutea of pregnancy and placenta. S. Minami, M. Yamoto, R. Nakano, Dept. Obst. and Gynec., Wakayama Medical College, Wakayama.

It has been postulated that the source of inhibin during the human pregnancy might be corpora lutea of pregnancy and/or placenta, since the plasma immunoreactive inhibin levels during the pregnancy appear to be higher than those during the menstrual cycle. In the present study, we investigated the cellular localization of inhibin subunits in corpora lutea of pregnancy and placental tissue during the pregnancy.

Corpora lutea and trophoblastic tissue were fixed in Bouin's solution and embedded in paraffin. Tissue sections of 4μm were cut on a microtome. We used ABC method with antisera selective for each synthetic peptide of inhibin (porcine inhibin α^{1-26}, porcine inhibin βA^{81-113}, human inhibin βB^{80-112}, kindly donated by Dr. W.Vale, The Salk Institute) as an immunohistochemical technique.

Immunohistochemical staining with inhibin subunits was observed in the syncytiotrophoblast of placental tissue and luteal cells of corpora lutea. In the placental tissue, the relative intensity of the staining with the antisera against inhibin α- and βA-subunits was strong in the early pregnancy and decreased toward the late pregnancy. On the other hand, the intensity of staining with inhibin βB-subunit increased toward the late pregnancy.

The results suggest that inhibin might be produced in the trophoblastic cells as well as in the corpus luteum of pregnancy.