481 Analysis of the Mixed Lymphocyte Reaction(MLR)-Blocking Antibodies (BAbs) in the sera of unexplained habitual aborters after immunotherapy with husband's lymphocytes. H.Ueda, N.Sekizuka, K.Takakuwa, K.Kanazawa, K.Tanaka, I.Hasegawa*, S.Goto*, Dept.Obst.and Gynec., Niigata Univ.Sch.Med., Niigata, *Dept.Obst.and Gynec., Niigata Teishin Hosp., Niigata.

We have described that BAbs detected by MLR inhibition assay are observed in the sera of all the patients after immunotherapy. In this study, we examined whether BAbs are blocking surface antigens of husbands' lymphocytes as stimulator cells (S) or T cell receptors of patients'lymphocytes as responder cells (R). Fourteen patients who had been undergone vaccination and continued their following pregnancies were chosen to be examined. Each serum (and its IgG) obtained before vaccination, after vaccination and during pregnancy of the patients were tested by three types of MLR inhibition assay. R were mixed with S in tested serum (or its IgG).(MLR-1) S pretreated with tested serum (or its IgG) were mixed with R in AB serum.(MLR-2) R pretreated with tested serum (or its IgG) and complement were mixed with S in AB serum.(MLR-3) The response of MLR-1,2 were strongly inhibited by vaccination in all the patients, while the response of MLR-3 were significantly but weakly inhibited by vaccination in seven of nine patients.

482 The significance of anti-idiotypic antibody in pregnancy. T. Mizuno, K. Aoki, T. Kimbara, Y. Yagami, Dept. Obst. and Gynec., Nagoya City Univ. Med. Sch., Aichi.

Recently, the immunological aspects of pregnancy has been studied extensively. Although the mechanisms involved are not clear, they seem to be related to the existence of blocking factors. Therefore, we investigated their presence in the serum of pregnant women. Materials and methods: Subjects were divided into 4 groups; [1] Pregnant women who maintained pregnancy. [2] Pregnant women who aborted. [3] pregnant women with habitual abortions who received immunotherapy and maintained pregnancy. [4] Pregnant women with habitual abortions who received immunotherapy and aborted. One-way MLR was performed between maternal mononuclear cells before immunotherapy and paternal mononuclear cells treated with MMC for 7-14 days. Maternal lymphoblasts were incubated with $Na_2{}^{51}CrO_4$, then autoserum and complement were added. From the $Na_2{}^{51}CrO_4$, release assay, % cytolysis was calculates. Results: In group [1], a gradual increase in % cytolysis was observed during pregnancy. In group [2], no increase in % cytolysis was observed during pregnancy. In group [3], autoserum after immunotherapy showed increase in % cytolysis as compared with that before immunotherapy. In group [4], no increase in % cytolysis was observed after immunotherapy. These results strongly suggest that anti-idiotypic antibodies may play an important role in the immunological mechanisms involved in pregnancy.

483 Successful pregnancies in AIH after immunization of husband's lymphocytes. K.Kobanawa, K.Kobanawa, K.Matsumoto, M.Takahashi, Dept. Obstet. Gyne. Tamari Medical Center, Kobanawa Hospital, Ibaragi

Recently it is recognized that the immunization of husband's lymphocytes is effective means for the treatment of habital abortion. The present study deals with the possibility of immunological support for embryo implantation using husband's lymphocytes.

Eighteen couples of longstanding infertility (more than 10 years) were selected among the patients incompliant of unexplained infertility, they have been treated AIH for 11-100 cycles without success. The isolated lymphocytes were immunized 2 or 4 times a month. Of these, 14 couples were recieved AIH with the Percoll concentrated sperm and the others were done with raw semen.

After 1-14 immunization cycles, 8 cases were achieved to pregnant, and all of them are well on going. The mechanisms of immunological support for implantation is still unknown, the present clinical result suggests that the immunization of husband's lymphocytes may be one of the new approach for unexplained longstanding infertility.