24 ABH and Lewis Blood Group Expression in Ovarian carcinoma. Hiroharu Arai, Hiroko Yoshida, Shigeru Izumi, Koichi Itakura, Masao Yano, Kanji Yamaoka, Soju Kurihara, The Second Tokyo National Hospital, Department of Obstetrics and Gynecology, Tokyo.

The expression of ABH and Lewis blood group antigens on 9 normal ovarian surface epithelium, 26 benign cystic ovarian tumors, 5 borderline ovarian tumors and 42 ovarian carcinoma was studied by immunohistochemical staining of tissue specimens using an avidin-biodin-peroxidase complex method with monoclonal antibodies. The pattern of antigen expression was as follows;

(1) In normal ovarian surface epithelium, appropriate ABH and Le^b antigen were expressed at a high level. And in benign cystic ovarian tumor (mucinouscystadenoma and serouscystadenoma), the expression of inappropriate ABH and Le^a, Le^x, Le^y antigen increased.

(2) In ovarian carcinoma, the pattern of blood group antigen expression was different in each histological type. In mucinouscystadenocarcinoma, the expression of inappropriate ABH antigen increased. In serouscystadenocarcinoma, the expression of Le^x increased. In mesonephroid cystadenocarcinoma and unclassified carcinoma, well-known as poorly prognosis, blood group antigens were expressed at a low level.

25 Circulating tumor-associated antigen detected by the murine monoclonal antibody CF511 in human epithelial ovarian carcinoma. M.Murae, K.Ohkawa*, E.Kimura, Y.Nakabayashi, K.Yamamoto, M.Yasuda, H.Ishikawa**, Y.Terashima, M.Tsukada***, Dept. Obst. and Gynec., Jikei Univ. Sch. Med., Tokyo, *Dept. Biochem., Jikei Univ. Sch. Med., Tokyo, **Dept. Anat. Jikei Univ. Sch. Med., Tokyo, ***SRL Labo. INC, Tokyo.

The murine monoclonal antibody (Mab) against human common epithelial ovarian carcinoma, CF511, was generated by immunizing the mice with human fetal tissue extract followed by booster injection of ovarian cancer cell line. Mab CF511 recognized the 600 KD sialylated glycoprotien different from previously known tumor-associated marker antigens. Mab CF511 reacted with common epithelial ovarian carcinomas, and also reacted with breast and lung carcinoma. In normal tissues, it cross-reacted with lung, breast, thyroid, fallopian tube and uterine endometrium. Serum levels of CF511 antigen was tested by an ELISA inhibition assay. CF511 antigen was elevated in sera of approximately 70 % of patients with common epithelial ovarian carcinoma. Cf511 antigen was elevated only in 3 of 47 sere from patients with benign gynecological diseases. These data suggested that CF511 antigen is a useful new ovarian tumor marker as a diagnosis and a management of the disease.

26 Ultrastructural localization of CA125 in the serous cystadenocarcinoma using monoclonal antibody 130-22(CA-130).I.Tanaka, T.Kamiya, K.Okamoto, S.Sawaragi, Y.Horikoshi, T.Nakajima, I.Sawaragi, K.Endo*, Dept. Obst. and Gyne.,Kansai Medical Univ.,Osaka, *Dept. Nuclear Medicine, Kyoto Univ.Hosp., Kyoto.

CA125 is an antigen expressed by more than 80% of nonmucinous epithelial ovarian cancer. Endo et al. developed a monoclonal antibody 130-22(CA-130) ,that detected CA125, from mice immunized with human lung cancer cells. To elucidate the ultrastructural localization of CA125, the reactions of CA-130 on ultrathin sections of ovarian serous cystadenocarcinoma were studied using low temperature procedures and immunogold techniques. The immunoreactive gold particles were localized on the limited part of stroma along the basement membrane of the epithelium and no specific labelings were observed on the secretory granules, nuclei and cell organelles. These results suggested that CA125 was secreted from the basal surface of the epitherium and became to have the antigenic characteristics recognized by CA-130. However, further examinations will be necessary to analyze the discrepancy between the above findings and our previous light microscopic studies with PAP method that revealed the specific staining for CA-130 in the cytoplasm of the epitherium.