271 Elevation of serum steroid sulfatase level in gynecologic cancers. T. Sugawara, T. Tanaka, S. Fujimoto, Dept. Obst. and Gynec., Hokkaido Univ. Sch. Med., Hokkaido.

Steroid sulfatase (STS) is a microsomal enzyme, which desulfates a number of 3β-hydroxysteroid sulfates. This enzyme possesses an important role in the conversion of sulfated steroid precursors to active steroid hormones. Recently, it was reported that STS activity is significantly higher in endometrial carcinoma tissue than in normal endometrium. However, it has not been impossible to measure an amount of STS in sera. In this study, we have developed an enzyme-linked immunosorbent assay (ELISA) of STS to measure an amount of the enzyme protein in sera of gynecologic patients.

Serum STS level was measured in normal women (69 cases) and patients with cervical carcinoma (30), endometrial carcinoma (17), and ovarian carcinoma (13), using a peroxidase-labeled anti-STS rabbit IgG.

The serum STS level (mean±SE) of endometrial carcinoma (166.0±34.0 ng/ml and ovarian carcinoma (176.1±22.6) were significantly elevated compared to that of normal (74.5±3.4). This method may be useful for diagnostic application as a tumor marker.

272 Immunohistochemical localization of basic ftoprotein in gynecological malignancy. K.Murakami, M.Matsuta, T.Izutsu, T.Kagabu, I.Nishiya. Dept. Obst. and Gynec., Iwate Medical Univ., Iwate.

Localization of basic fetoprotein(BEP) in carcinoma tissues of the female genital organs was investigated. And the dynamics of BFP in tumors was studied. For light microscopy, ordinary paraffin secretion were stained with an enzyme antibody by the Abidin-biotin complex method. For electoron microscopy, frozen secretions fixed by 4% paraformaldehyde were subjected to enzyme antibody indirect method. As the results, BFP positive cases were 73% in ovarian carcinomas, 70% in endometrial carcinomas and 100% in cervical carcinomas. With respect to the localization of BFP in cells, diffuse or granular localization was observed in the cytoplasm of BFP positive tumor cells. By the electron microscopic examintaions, BFP was found to localize in the ribosomes with well developed organelles. In addition, the figure of dialyzing secretion was observed. Based on these findings, BFP was found in des-differentiated cells still retaining the original structure and/or properties. This suggests BFP is a functional protein secreted by dialyzing pattern.

273 SCC antigen(SCC) expression in non-malignant lesions of squamous epithelium. F.Numa,N.Takeshima,H.Yamashita,K.Nakamura,O.Takeda,H.Abe,H.Kato S.Hamanaka*, Dept.Obst.and Gynec.,Yamaguchi Univ.Sch.Med.Yamaguchi,*Dept. Dermatol.,Yamaguchi Rousai Hosp.,Yamaguchi.

SCC expression in psoriasis and pemphigus which often show high positive rate of serum SCC levels were studied immunohistochemically using anti-SCC polyclonal antibody, and compared to that of pemphigoid which seldom shows positive serum SCC levels. In addition, the effects of TNF, derived from macrophages which appear in these inflammatory diseases, to SCC expression were examined in squamous epithelium incubation. SCC positive cells were found in the intermediate layer in psoriasis and pemphigus, concordant to the lesion. On the otherhand, SCC positive cells were never seen in the parabasal zone of epithelium and the lesion affected by pemphigoid. The release of SCC antigen was increased significantly by TNF in the non-malignant squamous epithelium.

It was concluded that the production of SCC were accelerated with benign lesions of intermediate layer of the squamous epithelium and TNF might enhance the release of SCC in these lesions.