

274 Analysis of the levels of Sialosyl-Tn antigen(S-Tn) in cervical mucus for a detection of cervical adenocarcinoma. J.Miyako, O.Iwanari, M.Moriyama, M.Moriyama, K.Ryukou, S.Nakayama, N.Yoshino, M.Kitao., Dept.Obst. and Gynec., Shimane Med. Univ., Shimane.

We investigated about immunohistochemical reactivity of S-Tn in tissues of cervical adenocarcinomas and usefulness of analysis of the S-Tn levels in cervical mucus for a detection of cervical adenocarcinomas. Immunohistochemical reactivity with anti-S-Tn was observed in 11 of 12 endocervical-type adenocarcinomas(91.7%). In contrast, in the endometrioid adenocarcinoma and clear cell adenocarcinoma groups, no immunohistochemical reactivity was detected. The cut-off value of S-Tn level in cervical mucus was 860(U/ml protein) determined from the levels in 299 healthy women's samples. The positive rate of S-Tn level in cervical mucus was 9.2%(7/76) in the benign gynecological disorder groups. In the cervical adenocarcinoma groups, all samples from endocervical-type(3 cases) showed high S-Tn levels over the cut-off value, other samples from other histological types(4 cases) showed low levels below the cut-off value. Therefore, the high S-Tn levels in cervical mucus strongly suggested an existence of cervical adenocarcinoma endocervical-type.

275 Long-term effect of radiotherapy to uterine cervical cancer on lumbar bone mineral density(BMD). T.Iiguma, T.Kazawa, Kanoya Prefectural Hosp., Kagoshima.

To examine the long-term effect of radiotherapy on lumbar spine, we measured BMD of 15 patients with uterine cervical cancer who had received radiotherapy 3 to 5 years before (Radiotherapy group, aged 46.0+2.4), 15 women who underwent castration (Castrated group, aged 42.5+4.6) and 10 normal control women (Control group, aged 43.7+7.3). BMD of lumbar spine (BMD of L3 and L5) was measured by Dual Photon Absorptiometry and BMD of radius by Dual Energy X-ray Absorptiometry. BMD of L5 was lower than that of L3 in all group; in radiotherapy group the difference was greater. There was significant correlation between BMD of L3 and BMD of radius in all groups. As for BMD of L5, there was correlation between BMD of L5 and BMD of radius in Control and Castrated groups, while no correlation in Radiotherapy group. In Radiotherapy group Δ BMD(L3-L5) was found significantly high as compared with Control and Castrated groups.

276 Assessment of urinary β -core fragment of hCG as a tumor marker of cervical cancer. R.Nishimura, M.Kinugasa*, M.Okamura*, A.Kimura*, F.Ohtsu*, K.Hasegawa*, K.Takeuchi* and S.Baba, Hyogo Institute for Research in Adult Diseases and Department of Obst. and Gyn., Hyogo Medical Center for Adults*

β -core fragment(β -CF) can be detected in the urine of women throughout pregnancy or in trophoblastic disease. It is also found in the urine of patients with nontrophoblastic cancers. We examined levels of β -CF in the urine samples from patients with cervical cancer and assessed its value as a tumor marker. Based on the cut-off value (0.2ng/ml) from control subjects, the overall positivity rate of urinary β -CF in cervical cancer group was 45%(57 of 128 patients), increasing from 32%(23 of 73) in stage I to 100%(2 of 2) in stage IV. These positivity rates exceeded or equaled those of the other markers, SCC, CEA, CA19-9 and CA125, simultaneously measured in the patients' serum. Serial determination in 28 patients with an elevated urinary β -CF prior to therapy showed that 24 patients had decreased level after successful treatment, but 2 of 4 patients with still elevated urinary β -CF levels during or after treatment subsequently relapsed. Determination of urinary β -CF levels may provide an useful tool in monitoring the response to treatment in patients with cervical cancer.