

44 Alpha fetoprotein determinations in the management of yolk sac tumors of the ovary. T. Hoshino, K. Park, F. Kobayashi, M. Yamashita, K. Tatsumi, M. Nonogaki, H. Shimada, Y. Ono, M. Ikeuchi, E. Takashima, K. Himeno*, Dept. Obst. and Gynec., Kobe City General Hosp., Hyougo, *Dept. Obst. and Gynec., Oomori Hosp., Hyougo.

Six patients with yolk sac tumor of the ovary who were treated at the Kobe City General Hospital from 1981 to 1990 are retrospectively reviewed. Two patients died of disease, and four patients are alive. AFP is a useful and sensitive tumor marker that can be very helpful in the follow-up of patients with yolk sac tumor. Serum AFP titers determined by RIA techniques may serve as useful tumor markers. AFP assays performed by RPHA techniques lack sufficient sensitivity to be employed routinely as tumor markers. It was found that serum AFP in those with a almost complete removal of tumors decreased postoperatively with a halftime of under five days. A decline in AFP titers to normal range, followed by any subsequent elevation, is an ominous finding suggestive of recurrent disease and requires prompt management. Two patients, who had no evidence of disease, had AFP titers in the narrow range (3.13 ± 0.56 ng/ml, 3.17 ± 0.57 ng/ml).

45 Growth of hydatidiform mole in Immune-Deficient scid mice. T. Kenjo, T. Tsuda, T. Matsuyama, K. Iwazaki, A. Fujii, Dept. Obst. and Gynec., Tokai Univ. Sch. Med., Kanagawa.

Although nude mice have been used to grow cultured cells derived from hydatidiform mole, none of hydatidiform mole samples grew in nude mice. We expected that scid (severe combined immunodeficiency disease) mice might be better recipients for growth of hydatidiform mole because the immune deficiency in scid mice is more severe than that in nude mice.

In total, 4 hydatidiform mole samples were tested for the ability to grow in scid mice. As expected, two of 4 samples can be successfully propagated in scid mice without any alteration of morphology and expression of some tumor antigens (for example, hCG and SP₁).

In summary, scid mice appear to offer several advantages over nude mice as models for growth of hydatidiform mole.

46 Oral contraceptives suppress the secretion of hCG like substance. T. Isozaki, S. Sasaki, H. Hatano, H. Takahashi, H. Tenjin, H. Konishi, T. Araki, Dept. Obst. and Gynec., Nippon Medical School, Tokyo.

Recently absolute specific measurement of a very small amount hCG has become possible by enzyme-immunoassay using specific monoclonal antibody for beta-subunit carboxyl terminal peptide. Then it seems that it is not necessary to use the term of LH level of hCG when we discuss about a very low titer of hCG at the remission. On the other hand, this high sensitive EIA hCG assay has revealed the existence of hCG like substance in the women aged 40 or more. We had 4 patients who showed positive low titer hCG by this assay during secondary follow up after evacuation of mole. One patient had received apparently unnecessary chemotherapy because of this results. After this experience we gave oral contraceptives to 14 volunteer menopause women who showed low positive of EIA hCG assay. 12 out of 14 women showed negative EIA hCG after taking contraceptives for two weeks. The other three patients also showed negative of EIA hCG after taking pills. The results obtained show us a possibility that oral contraceptives could suppress the secretion of hCG like substance from pituitary.