

301 The existence of ovarian tumors with the mesonephric glomeruli as histogenetic precursors. M. Satoh, K. Murayama, Y. Tomioka, H. Tazima, K. Ogura, S. Iida, T. Yoshinari, M. Hirano, T. Yoshida, T. Hata, S. Higashi, Dept. Obstet. and Gynec., Saitama Medical School, Saitama.

From the histogenetic classification of ovarian tumors based upon the new theory of gonadogenesis (the mesonephric hypothesis), the existence of ovarian tumors with the mesonephric glomeruli as histogenetic precursors can also be inferred. The morphological characteristics of mesonephric system are summarized below. 1. The mesonephric glomeruli are formed when the medial ends of the mesonephric tubules envelop clusters of capillaries. On the capillary side, the cells composing the walls of the tubules which have enveloped the capillaries are cuboidal, whereas the epithelium on the opposite side are flattened. 2. Accumulation of basal lamina-like materials are observed in the mesonephric cells. 3. Immunocytochemically, markers such as alpha-fetoprotein and alpha-1-antitrypsin are detectable in the mesonephric glomeruli and proximal mesonephric tubules. On the basis of morphological and immunocytochemical similarities, ovarian tumors with a mesonephric glomerular histogenesis, as simulated tissues, are considered to be actually manifested in the tumors hitherto classified as endodermal sinus tumor, yolk sac tumor or polyvesicular vitelline tumor.

302 Characterization of three human ovarian clear cell carcinoma (OVISE) lines. T. Nakazawa, I. Gorai, F. Hirahara, H. Minaguchi, Dept. Obst. and Gynec., Yokohama City Univ. Sch. Med. Kanagawa.

Seventy-two clonal lines were obtained with limiting dilution from a new human ovarian clear cell carcinoma line, OVISE, established from the metastatic tumor. Three of these 72 clonal lines (OVISE-1, -2 and -3) were extensively analysed.

The cells of OVISE-1 which were small in shape had doubling time of 60 hours and cell density of 6×10^5 cells/cm². The OVISE-2 cells with spindle shape had doubling time of 60 hours and cell density of 5×10^5 cells/cm². Large polygonal shaped OVISE-3 cells had rather slow doubling time of 100 hours and cell density of 3×10^5 cells/cm². The levels of tumor marker secretion by these three lines showed variability; the level of CA19-9 by OVISE-1 was 1/200, that of TPA was about 1/10; the level of CA 125 by OVISE-2 was twice; the level of TPA by OVISE-3 was about one and half times as compared with that of parental line. Immunohistochemical study revealed that the positivity of tumor marker-stained cells was parallel to the levels of tumor marker secretion by cultured cells. Chemosensitivity test with MTT assay showed diversity. Our results suggest that OVISE established from metastatic tumor after chemotherapy may retain polymorphism like original tumor.

303 Amylase in Morgagni's hydatid. Y. Matsui, S. Kyo, H. Kanoh, Y. Okudaira, Dept. Gynec., Res. Inst. Microb. Dis., Osaka Univ., Osaka

In 1745, Morgagni's hydatid was first described by Giovanni Vaptista Morgagni, but its etiology has been unknown and miscellaneous till now. The activity of amylase and the pattern of its isoenzymes were investigated in 31 cases of hydatid. First, a rapid and simple method using testape (Rapignost Amylase) showed quite high values in all cases. The mean volume of hydatid was 0.43 ml, and the value measured by clomogen's method was 18450 ± 13390 su/dl. Each value was quite higher than the serum level. Furthermore, the isoenzymes by acrylamide gel electrophoresis showed genital type bands which were clearly separated from pancreas and salivary type.