

280 Diagnosis of early malignant ovarian tumors by MRI plus CT. M.Kasai, K.Satoh, H.Suzuki, H.Iida, Dept.Obst.and Gynec.,Iwate Prefectural Central Hosp.,Morioka,Iwate.

Among patients with ovarian tumors who had undergone CT before surgery, 44 in whom benign tumors, LPM, or early cancer were suspected also underwent MRI. Tumors were grouped in to the following 5 classes from the CT finding: 1)unilocular lesions showing neither mural hypertrophy nor any protrusions into the cyst cavity, 2)multilocular lesions showing no septal hypertrophy, 3)unilocular lesions showing mural hypertrophy or protrusions into the cyst cavity, 4)multilocular lesions showing irregular hypertrophy of the septum, and 5)lesions that were a mixture of cystic and solid elements. From the MRI findings, tumors were classified in terms of the signal intensities of the cyst fluid, cyst or septal wall, and the tissue protruding into the cyst cavity. The results were compared with the histopathological findings obtained after surgery. Conclusion: The combination of MRI and CT evaluation of ovarian tumor before surgery achieved a higher rate of accuracy in the diagnosis of malignancy. Since MRI provides information on the histologic nature of the tumor that is not available by conventional methods, it is also useful for choosing the appropriate therapy for patients with ovarian tumors.

281 Abnormal endometrial smear and plasma estradiol level in the endometrial hemorrhagic disease. K.Umezaki, J.Teranishi, M.Nishikawa, T.Nakajima, I.Sawaragi. Dept.Obst.and Gynec., Kansai Medical Univ.,Osaka.

The endometrial smear test(E-PAP) is useful in the mass screening of the endometrial cancer(Ca), which is accompanied by uterine bleeding even at the early stage. However, there are some difficulties in the cytological criteria of Ca, the endometrial hyperplasia(Hy) and others with abnormal E-PAP. Sixty hemorrhagic and 64 non-hemorrhagic cases were studied with E-PAP, endometrial biopsy(Bx) and plasma estradiol concentrations(E₂). Fourteen cases of Ca, 8 Hy, 19 dysfunctional uterine bleeding(DUB), 37 myoma(My) and 46 others with no pathological changes were diagnosed with Bx. In 35 abnormal E-PAP, there were 14 Ca, 3 Hy, 4 DUB, 5 My, and 9 others. Eleven of 14 Ca and 3 of 8 Hy in Menopause(Mp) showed high E₂ concentrations. One of 19 DUB only showed high E₂ concentrations. There were no cytological differences in Ca with high or low E₂. However, smaller clusters and larger cells with slight atypism were often observed in menopausal cystic Hy with high E₂. Abnormal E-PAP with high E₂ concentrations in Mp must be suspected malignancy. Cytological findings of larger cells and clusters with the mitosis might be correlated to the serum high E₂ concentrations, which should be considered to become Hy.

282 Flow cytometric study on DNA ploidy of uterine endometrial cancer. T.Nanjo, K.Nagai, T.Sawai, Y.Watanabe, M.Ikeda, K.Noda, Dept.Obst.and Gynec.,Kinki Univ.Sch.Med.,Osaka.

Cytofluorometric study on DNA ploidy of uterine endometrial cancer have carried out in use of paraffin block ope specimen. We used Hedley's method and stained by P.I.. DNA aneuploid was recognized in 25% of patients with uterine endometrial cancer. Higher percentage of DNA aneuploid was recognized in cases of advanced surgical staging, such as poorly differentiated type and deep myometrial invasive type. Patients with DNA aneuploid lived shorter than patients with DNA diploid. We conclude that DNA ploidy is useful prognostic parameter on uterine endometrial cancer.