

84 Evaluation of signal intensities of MRI on diagnosing the invasion of uterine endometrial carcinoma. M.Goto, S.Okamura, M.Ueki, O.Sugimoto, Dept. Obst. and Gynec., Osaka Medical College, Osaka.

In order to assess the ability of Magnetic Resonance Imaging (MRI) to distinguish endometrial cancer from normal endometrium, myometrium and cervical stroma, we analyzed signal intensities. Seventy-five histologically proved patients were imaged with a Signa 1.5T (General Electric), with a plastic bottle containing 500ml of distilled water placed on the lower abdomen. Spin-echo images with T<sub>1</sub>-weighted images (a TR of 600msec, a TE of 20 msec), enhanced T<sub>1</sub>-weighted images (an image taken after intravenous injection of 0.2ml/kg of Gd-DTPA, a TR of 600msec, a TE of 20msec) and T<sub>2</sub>-weighted images (a TR of 2000msec, a TE of 60msec) were used. Signal intensities were analyzed by measuring the ratio of target region to distilled water using profile curves on sagittal images. Only in enhanced T<sub>1</sub>-weighted images did endometrial cancer have a lower signal intensity than endometrium ( $p < 0.05$ ), and was useful in differentiating endometrial cancer from endometrium. Endometrial cancer had higher and lower signal intensities than myometrium in T<sub>2</sub>- and enhanced T<sub>1</sub>-weighted images, respectively (both  $p < 0.01$ ). Both were useful in assessing myometrial invasion. All three images were useful in assessing the invasion of cervical stroma.

85 The value of histochemical analysis of Sialyl SSEA-1 antigen in patients with gynecologic tumors. A.Endoh, K.Ohtomo, K.Itoh, H.Makino, Y.Ide, K.Shikano, N.Ozawa, S.Satoh, A.Yajima, Dept. Obst. and Gynec., Tohoku Univ. Sch. Med., Sendai.

In this study, the tissue localization of Sialyl SSEA-1 (SLX) and CA125 in the gynecological malignant tumors was examined by the avidin/biotin immunoperoxidase technique using anti SLX and CA125 monoclonal antibody.

A intense and more frequent positive staining by anti SLX antibody was observed in the tissue of well differentiated adenocarcinoma of the endometrium (Grade 1, positive rate of SLX: 75%), well differentiated serous cystadenocarcinoma (65%) and chemotherapy effective ovarian cancers (74%).

The weaker and less frequent positive staining by anti SLX antibody was observed in the tissue of poorly differentiated adenocarcinoma of the endometrium (Grade 3, positive rate of SLX 14%), moderately and poorly differentiated serous cystadenocarcinoma (40%) and chemotherapy resistant ovarian cancers (27%). On the contrary, the intense staining by anti CA125 antibody was shown in the same tissue (the same positive rate of CA125: 71%, 80%, 58%).

The histochemical analysis of SLX appears to be a useful marker in the diagnosis of chemotherapy resistant cancers.

86 Urodynamic study of bladder dysfunction after therapy of uterine cancer. K.Hamada, K.Shigekawa, Y.Takeda, T.Nakahashi, S.Matsuura, S.Yoshioka \*, Dept. Obst. and Gynec., Ehime Univ. Sch. Med., Ehime, \* Dept. Urol., Yahatahama Munic. Hosp., Ehime.

The Bladder dysfunction after radical hysterectomy (RH) and radiotherapy (RT) for uterine cancer have been frequently observed. Urodynamic study (UDS) were carried down and various drug therapies were tried in 73 cases with complications after therapy for uterine cancer. URODYN-5000 (DANTEC Co.) was used for UDS. The frequency of urination per day, the volume of urine at each excretion, the number of incontinence per day, and the number of pad exchange per day were recorded in a diary. Low compliance was induced immediately after RH and low capacity was induced more than 5 years after RH. Some cases after Modified RH showed low compliance without any clinical symptoms. RT caused mild low compliance and low capacity more than 5 years after therapy. A combination treatment with  $\beta_2$ -stimulant and Imipramine showed most effectiveness for these bladder dysfunction after RH and/or RT.