7 p53 gene expression in human uterine cervical cancer. T. Nihei, S. Sagae, R. Kudo, Y. Mugikura, T. Okazaki, T. Takeda, K. Terasawa, S. Ishioka, S. Takashima, M. Hashimoto. Dept. of Obst.and Gynec., Sapporo Medical College, Hokkaido.

Recent studies have clarified p53 is not oncogene, but anti-oncogene. In order to elacidate the role of p53 gene in the process of carcinogenesis of human uterine cervical cancer, we could study the expression of p53 product immunohystochmically by using anti-p53 MoAb (PAb1801), and compare with the expression of ras p21 (rp35). Tumor specimens were collected at resection from 77 patients. The cellular distribution of p53 product staining was diffuse in the cytoplasm of the tumor cells. The frequency of positive p53 product cases was 70-80% in normal squamous epithelium and CIS, 60.0% in microinvasive carcinoma, whereas in invasive carcinoma it decreased to 21.6%. On the other hand, ras p21 positivity increased in the process of carcinogenesis. In the cases of invasive carcinoma, patients with more advanced stages showed a lower frequency of p53 product expression, but a higher frequency of ras p21. It was suggested p53 gene has a different correlation to ras oncogene in the process of carcinogenesis.

8 Detection of HPV in adenocarcinoma and glandular dysplasia of the uterine cervix using the polymerase chain rection. H.Fujimoto,N.Nagai, H.Tanimoto,K.Takehara,M.Tamaki,S.Ota,A.Fujiwara*, Dept.Obst.and Gynec., Hiroshima Univ.Sch.Med.,Hiroshima,*Onomichi Sogo Hosp.,Hiroshima.

Human papillomavirus (HPV) 16 and 18 DNA are frequently detected in squamous cell carcinoma and the related lesions of the uterine cervix. The polymerase chain reaction (PCR) is a method for specific gene amplification technology with a thermostable DNA polymerase.We applyed PCR to detect HPV 16 and 18 early gene E_7 in adenocarcinoma and glandular dysplasia of the uterine cervix using formalin-fixed sections.

Of the 61 patients of adenocarcinoma and the related lesions,31 cases (50%) were positive for HPV 16 and/or 18.HPV 16 was detected in 2 cases (12%) of glandular dysplasia and 16 cases (35%) of adenocarcinoma,HPV 18 was detected in 3 cases (!8%) of glandular dysplasia and 16 cases (35%) of adenocarcinoma.

These results demonstrate that PCR makes it possible to detect HPV DNA from deparaffined sections and also show an association between HPV and adenocarcinoma and glandular dysplasia of the uterine cervix.

9 Amplified DNA detection of Human Papillomavirus (HPV) types 16 and 18 E7 gene in cervical, vaginal and vulvar scrapes by Polymerase chain reaction. S.Ohta, N.Nagai, H.Tanimoto, H.Fujimoto, and A.Fujiwara*, Dept. Obst. and Gynec., Hiroshima Univ. Sch. Med., Hiroshima, *Dept. Obst. and Gynec., Onomichi Sogo Hosp., Hiroshima.

Vaginal and vulvar scrapes from 30 patients which have cervical lesions (13 of mild dysplasia, 5 of moderate dysplasia, 4 of severe dysplasia, 3 of carcinoma in situ, and 5 of invasive carcinoma) were examined by the polymerase chain reaction (PCR), to detect amplified E7 gene of HPV types 16 and 18 DNA sequences. HPV types 16 and 18 DNA were detected in all of cervical scrapes. In 24 of vaginal scrapes, the same type of HPV as that of cervical scrapes were detected. The results in vulvar scrapes showed that as the histological grade of the cervical lesion became higher, the detection rate of HPV DNA decreased.

We suggested that, in addition to the investigation for natural history of HPV infection such as we presented, cell dynamics, local immunological status and any other factor in the HPV-infected part must be investigated to clarify the oncogenesis of HPV in the uterine cervix.