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Heterogeneous human papillomavirus types in female genital tract.
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As reported before we have newly cloned 4 types of human papillomavirus (HPV 58, 59, 61, 64) from the lesions of a cervical carcinoma or vaginal intraepithelial neoplasias (VaINs) during the last 3 years. In this study we performed a full-scale HPV typing of the tissue specimens of cervical carcinoma and its related diseases from more than 300 patients by Southern blot analysis using multi-cut enzymes for HPV-DNA to know the real types of HPV identified in these lesions. As a result 15 of established HPV types (HPV 6,11,16,18,30,31,33,42,51,52,56,58,59,61,64) were detected in these lesions including condyloma acuminata, in addition the existence of some uncharacterized HPV-DNAs were surmised. Therefore we cloned 3 DNAs among them, one of which from a VaIN was confirmed as a new isolate by International Reference Center for HPV (Heiderberg, Germany), and was designated HPV 62. Our results were similar to those of Pasteur Institute, France (shown in the International Papillomavirus Workshop, 1990), indicating the heterogeneity of HPV types detected in the female genital tract.

2 Unknown human papillomavirus (HPV) in uterine cervical lesions. <u>T.Nunoyama</u>, <u>H.Shirasawa</u>, <u>H.Iwasaki</u>, <u>I.Fukazawa</u>, <u>K.Kubota</u>\*, <u>T.Kasai</u>\*, <u>S.Sekiya</u>, <u>H.Takamizawa</u>, Dept. Obst. and Gynec., Chiba Univ. Sch. Med., Chiba, \*Dept. Obst. and Gynec., Chiba Kaihin Hosp., Chiba.

Colposcopically directed cervical punch biopsies from 119 patients were screened by Southern blot analysis in a low stringent condition, using HPV 6, 11, 16, 18, 31, 33 and 35 DNAs as a probe. The biopsies represented different stage of dysplasia (92 cases), carcinoma in situ (10 cases) and invasive carcinoma (17 cases). Southern blot analysis in a low stringent condition showed that known and unknown types of HPV were present in 79% (94/119) of the lesions. Known types of HPV (16, 31, 33, 42, 52 and 58) were detected by in 2% to 24% of histologically uterine cervical lesions. 12 types of unknown HPV were detected by in 10% of the lesions. These results suggest that the high frequent association of HPVs with premalignant cervical lesions in Japan.

3 Detection of Human papillomavirus DNA in adenocarcinoma and adenosquamous carcinoma of the uterine cervix. <u>Y.Hayashi</u>, <u>T.Iwasaka, K.Hara, M.Yokoyama, T.Hachisuga, K.Fukuda, Y.Okuma, H.Sugimori</u>, Dept. Obst. and Gynec., Saga Medical School, Saga.

The relationship between several types of human papillomavirus and cervical adenocarcinoma and adenosquamous carcinoma was examined using the polymerase chain reaction system. Paraffin-embedded tissues excised from 27 Japanese patients (20 adenocarcinomas and 7 adenosquamous were examined to search for human papillomavirus types carcinomas) 6/11, 16, and 18. Human papillomavirus type 16 DNA was detected in 5 adenocarcinomas and 2 adenosquamous carcinomas. Human papillomavirus type DNA was found in 3 adenosquamous carcinomas. All specimens were 18 negative for human papillomavirus types 6/11. Thus, human papillomavirus type 16 was the most common type in adenocarcinoma, whereas human papillomavirus type 18 was more frequently detected in adenosquamous carcinomas, and there may be an association between human papillomaviruses and the development of certain adenocarcinomas and adenosquamous carcinomas of the cervix.

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