Human papillomavirus in cervical cancers of Malaysians.

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Abstract

AIM: With cervical carcinoma remaining the second leading cancer among Malaysian women, it is imperative to clarify the prevalence of human papillomavirus (HPV) in this respect, considering the dearth of local information.

MATERIAL AND METHODS: Formalin-fixed, paraffin-embedded (FP) tissues of 29 invasive cervical carcinoma cases, diagnosed between 1 January 1991 and 31 December 1992, fresh, frozen (FF) and paired FP tissues of 43 cases diagnosed between 1 January 1995 and 31 December 2000, and 21 FF normal control cervices were subjected to polymerase chain amplification (PCR) for HPV following successful amplification of a 268 bp β-globin fragment using primers specific for HPV types 6, 11, 16 and 18 and consensus L1 ORF (MY09/11).

RESULTS: HPV was detected in 69.0% of the cases diagnosed in the earlier, 88.4% of those in the later period and 4.8% of the normal control cervices. HPV 16 formed 80.0% of the HPV types in the earlier and 55.3% in the later period, while HPV 18 formed 5% in the earlier and 13.2% in the later. HPV 16 was more common in squamous (56.4%) than adeno/adenosquamous carcinomas (35.3%), while HPV 18 was detected in 17.6% of adeno/adenosquamous and 5.5% squamous carcinomas.

CONCLUSION: HPV prevalence in invasive cervical carcinoma of Malaysians is similar to that observed worldwide. Together, HPV 16 and 18 constituted 85% of the HPV types responsible for cervical carcinogenesis in Malaysians in the earlier and 68% in the later period. Thus, the use of current vaccines should lower cervical carcinoma rate significantly.