Detection and typing of human papilloma virus DNA in cervical cancer with In situ hybridization method

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Abstract

Cervical cancer is one of the most frequently found cancers in women and appears to have a viral aetiology.certain types of the human papillomavirus (HPV) are well established as the primary causes of cervical cancer.Clinical follow-up data, histopathologic diagnosis, Insitu hybridization (ISH) and HPV DNA typing were available from 60 patients.ISH technique was performed with comercial biotinylated probes.The presence of 7 high risk HPV was evaluated in 60 cervical biopsies with squamous cell carcinoma (SCC) and Cervical Intraepithelial neoplasia (CIN) of differeat degrees by ISH.We analysed 60 biopsies from Iranian women. 42 of 60 (70%) carcinoma specimens were positive for HPV-DNA. HPV 31/33/51 (25%) was most frequently found, follwed by HPV 16/18 (23.33%) and HPV 6/11 (21.66%) while HPV negative cases were 18(30%).High risk HPV types appear to be most frequently associated with SCC and CIN. ISH is a sensitive test in the detection and typing of HPV DNA both in clinical and latent infections.

Keywords: Cervical cancer, Insitu hybridization, Pathology, Human papillomavirus.
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