HPV INFECTION IN MOTHERS OF CHILDREN WITH RECURRENT RESPIRATORY PAPILLOMATOSIS

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Objectives: The purpose was to determine a prevalence of genital HPV infection and associated lesions in mothers of patients with recurrent respiratory papillomatosis (RRP) and to investigate the relation between mother’s gynecological history and the local status of her child with RRP.

Materials and Methods: Twenty-five mothers of patients with RRP in a German group (mean age 38.9 ± 11.7) and 23 mothers in a Russian group (mean age 29.3 ± 7.2) were accepted for a present study and followed for the mean of 16.7 ± 0.3 and 0.86 ± 0.2 years, respectively. The work-up included a speculum exam, Pap smears, cervical biopsy and HPV typing. Children of these mothers had juvenile or adult-onset RRP; they underwent surgery and treatment with interferon α.

Results: Three of 23 German (13%) and nine of 23 Russian mothers (39%) had condyloma accuminatum. Three of 23 German (13%) and 14 of 20 Russian mothers (70%) had HPV signs in Pap smears. HPV DNA was detected in 5 of 14 German (35.7%) and 10 of 23 Russian mothers (43.5%). Six of 21 German (28.6%) and three of 20 Russian (15%) mothers had CIN I. Seven German mothers (28%) had a hysterectomy. Five mothers with a hysterectomy had children with an aggressive course of juvenile-onset RRP and in three of these children squamous cell carcinoma of the lung developed 29.7 ± 6.9 years after the onset of RRP.

Conclusions: HPV DNA, cytological and histological indicators were found in the genital tract of mothers of patients with RRP. Prevalence of cytological HPV indicators and condyloma accuminatum was higher in Russian mothers; prevalence of cervical dysplasia and hysterectomy was higher in German mothers who had a longer period of observation. An adverse outcome of the disease in the child was associated with adverse gynecological history of the mother.