No Evidence of Mother-to-Infant Transmission of Human Papilloma Virus Via Human Breast Milk

To the Editors:

We read with interest the article by Sarkola et al. who evaluated the presence of human papilloma virus (HPV) in human breast milk. In this study, HPV-16 DNA was detected in 4% of the studied breast milk samples implicating the possible role of breast-feeding in the mother-to-infant transmission of HPV. The presence of HPV in breast milk can potentially increase the anxiety of mothers with HPV-related cervical neoplasia discouraging them from breast-feeding their babies.

We recently tried to detect HPV DNA using polymerase chain reaction in breast milk collected by a 34-year-old mother with cervical low-grade squamous intraepithelial lesions. Consent form was acquired from the mother and ethical approval was obtained. Four breast milk samples were collected on day 0 (colostrum), day 1, day 7, and day 14 of baby’s life. DNA extraction and HPV detection and typing using polymerase chain reaction were performed as has been previously described. HPV detection and typing were also performed in her cervical smear collected before baby’s delivery. Although HPV-16 was detected in the mother’s cervical smear, HPV DNA was not detected in the studied breast milk samples.

The presence of HPV in breast milk and its possible clinical relevance regarding HPV transmission in children needs to be clarified. Our finding was relevant to the results of the study by Sarkola et al., who demonstrated no relationship between maternal cervical and breast milk HPV infection. To date, vertical mother-to-infant transmission of HPV has been proposed by various studies, however, the role of breast-feeding in HPV transmission remains unclear. A search of the literature does not appear to provide any primary evidence to support involvement of breast-feeding in HPV transmission. At the moment, no evidence as yet exists to support avoidance of breast-feeding due to possible mother-to-infant transmission of HPV via breast milk.

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REFERENCES


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