Prevalence of human papillomavirus (HPV) type 16 variants and rare HPV types in the central Amazon region

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ABSTRACT. Infection by human papillomavirus (HPV) is one of the primary causes of mortality by cancer in northern Brazil. Sexually active women from Manaus, Amazonas, without cytological alterations and women with pre-malignant and malignant cytological alterations were examined for HPV virus, identified via PCR and sequencing. The target region for this study was part of the L1 capsid gene of HPV. Twenty-three samples that were PCR-positive were sequenced. Analysis of 336 bp demonstrated a high incidence of high-risk HPV types in the population of Manaus, identified as HPVs 16, 33, 58, 66, 68. HPV type 16 was the most prevalent, presenting two variants similar to the Asian-American (AA) and East-Asian type (As) variants. A rare HPV type 13 related to “Heck’s disease” was also detected. This preliminary provides important information about the HPV circulating in Amazonas State.

Key word: HPV; PCR; Amazon region; Cervical cancer