Human papillomavirus in ameloblastoma.

(PMID:20727492)

Correnti M, Rossi M, Avila M, Perrone M, Rivera H

Instituto de Oncología y Hematología, MPPS, Instituto de Investigaciones Odontológicas, Universidad Central de Venezuela, Caracas, Venezuela. mcorrentip@yahoo.com

Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, and Endodontics [2010, 110(3):e20-4]

Type: Journal Article, Research Support, Non-U.S. Gov't

DOI: 10.1016/j.tripleo.2010.04.030

Abstract

<u>OBJECTIVE</u>: Ameloblastomas are benign epithelial tumors of odontogenic origin, with a high recurrence rate and local aggressiveness. A few preliminary studies have demonstrated HPV presence mainly in peripheral ameloblastomas. The purpose of this study was to detect HPV-DNA in intraosseous ameloblastomas.

<u>METHODS</u>: Eighteen cases of intraosseous ameloblastomas of different histological variants were selected. Immunohistochemistry, CISH, nested-PCR, and INNOLiPA HPV Genotyping v2 were used.

RESULTS: The predominant age group was between the third and fourth decades of life. Males were more affected with 61% and females represented 39%. Of the 18 cases, 7 were solid multicystic tumors and 11 were unicystic. Of the histological variants, the plexiform represented 3 (17%) of the 18, 2 (11%) were follicular, 2 (11%) were acanthomatous, and 1 (6%) was desmoplastic. All cases were HPV negative by immunohistochemistry and CISH. HPV-DNA was detected in 6 (33%) of the cases by nested-PCR. HPV 6 was the most frequent genotype in 4 (66%) of the 6. Two cases presented a mixture of HPV 16, 33, and HPV 6, 42 respectively. Four of the unicystic ameloblastomas were HPV positive; of these, all presented koilocytic changes and were associated with dentigerous cysts, whereas only 2 positive cases corresponded to solid ameloblastomas. None of the positive cases were related to recurrence rate.

<u>CONCLUSIONS</u>: We may conclude that HPV low and high risk was detected in our sample of intraosseous ameloblastomas. HPV positivity was observed more in the unicystic cases than solid types.