

Amit M, Ilana K, Avraham SP, Binenbaum Y, Bachar G, Billan S, Zaarura S, Czerninski R, Bar-Tov M, Maly A, Akriash S, Gil Z.

Trends in human papillomavirus-related oropharyngeal cancer in Israel.  
Head Neck. 2016 Apr;38 Suppl 1:E274-8.

**BACKGROUND:** The role of human papillomavirus (HPV) infection in oropharyngeal cancer (SCC) is well established. The annual incidence of oropharyngeal SCC in Israel is considerably lower than that in the United States. The purpose of this study was to assess the rate of HPV-related oropharyngeal SCC in Israel. **METHODS:** The cohort included patients with oropharyngeal SCC who were treated during 1999 to 2011 in Israel. HPV typing was carried out using reverse hybridization and immunohistochemistry. **RESULTS:** Of the 74 patients analyzed, 25 (33.7%) had detectable HPV DNA. Patients in the HPV-positive group tended to be younger, with a higher rate of nodal metastases, and no history of smoking ( $p < .02$ ). **CONCLUSION:** This study demonstrated a rate of HPV-related oropharyngeal SCC in Israel as approximately 3-fold lower than in Western countries. Low exposure to HPV-16, a lower rate of transformation, to cancer or protective genetic factors may contribute to the lower rate of oropharyngeal SCC in Israel