

Turkish Journal of Medical Sciences

Turkish Journal
of
Medical Sciences

Detection of Human Papillomavirus Infection in Esophageal Carcinomas by the Histopathological Method and Polymerase Chain Reaction Technique

İlhami KIKI¹



Mehmet GÜNDOĞDU²

Fevzi POLAT²

Cemal GÜNDOĞDU³

Departments of ¹Internal Medicine, ²Biotechnology, ³Pathology, Faculty of Medicine, Atatürk University,

Erzurum - Turkey

 [Keywords](#)
 [Authors](#)



medsci@tubitak.gov.tr

[Scientific Journals Home Page](#)

Abstract: A series of 30 surgical resection materials of patients with squamous cell carcinoma (SCC) and 10 with adenocarcinoma (AC) were analyzed histologically and by polymerase chain reaction (PCR) to demonstrate whether human papillomavirus (HPV) has a role in the etiology of esophageal cancers. Epithelial changes suggesting HPV infection were histopathologically detected in 19 of 30 (63.3%) SCC and in 4 of 10 (40%) AC cases. By PCR, HPV type 16 and/or type 18 DNA were detected in 10 of 30 (33.3%) SCC and HPV type 18 DNA alone was detected in 1 of 10 (10%) AC cases. Histopathologic findings related to HPV infection were detected in all the cases with positive HPV DNA. A significant correlation was present between histopathologic positivity and PCR positivity. The positivity rate of HPV infection was higher in well-differentiated SCC cases when compared to poorly-differentiated ones. These results suggest that HPV might have a role in the etiology of esophageal cancers and histopathologic findings of HPV infection were reliable markers for the presence of HPV DNA in tissue.

Key Words: Esophagus cancer, Human Papillomavirus

Turk J Med Sci 2002; **32**(3): 223-230.

Full text: [pdf](#)

Other articles published in the same issue: [Turk J Med Sci,vol.32,iss.3.](#)