

Table 2.22. Prevalence of HPV DNA in case series of cancers of the oropharynx and tonsil, detected by polymerase chain reaction method (PCR)

| Reference, study location | Method of detection ^a (types included) | Sites included | No of cases | Overall HPV positivity (%) | Type-specific HPV positivity (%) | | | | | | | Multiple infections (%) | Comments |
|--------------------------------------|---|--|---|------------------------------|----------------------------------|-----|-------------------------|------|-----|----------------------|---|-------------------------|--|
| | | | | | 6 | 11 | 16 | 18 | 31 | 33 | Others (type) | | |
| Tachezy et al (2005), Czech Republic | GP5+/GP6+ | Oropharynx Oral | 56 12 | 57.0 25.0 | | | 41 (sites combined) | | | 4.4 (sites combined) | 4.4 (unch) | | Fresh frozen All cases in non smokers were HPV + |
| Kreimer et al (2005), Metanalysis | PCR | Vallecula, walls of oropharynx, tonsil | 969 | 35.6 | 2.5 | 0.7 | 30.9 | 1.0 | 0.0 | 1.1 | <0.2 each | 16/18 .1 % | |
| Hammarstedt et al (2006), Sweden | GP5+/6+ Cpl/IIG Sequencing | Tonsil | All years 49.0 1970's 30 1980's 42 1990's 84 2000-02 47 | 23.3 29.0 57.0 68.0 | | | 43.0 all years combined | | | 1.5 | 35 0.5% Unch .5% | | Paraffin embedded |
| Charfi et al (2008) France | PCR amplification of GAPDH gene 16,18,3,6,11 | Tonsil | 52 | 62.0 | | | 52.0 | | | 2.0 | 7.6 (unch) | | All patients without a history of tobacco were HPV positive Formalin-fixed tissue Positivity equal by gender |
| Kim et al (2007) South Korea | PCR, HPV genotyping DNA chip (Biocore) | Tonsil | 52 | 73.1 | | | | 65.4 | | | 18, 33, 35, 58 (not specified how many of each) | 0 | Paraffin embedded 61 tonsillectomy patients as controls (11.6% positivity, 4.3% HPV16, rest HPV58 and low risk types 6,11 84) |
| Ernster et al (2007) USA | Type-specific HPV 16/18 PCR | Base of tongue Palatine tonsil Oropharynx Waldeyer's ring | 72 | 69.0 | | | 69.0 | 0.0 | | | | | Paraffin blocks from tumor or lymph node metastasis Fraction of tumours that are HPV-positive increased for the more recent tumours |

Note: Percentages given for HPV types correspond to percentages of total cases.