

**Table 2.24. Case-control studies of *helicobacter pylori* infection and head and neck cancer**

Reference, study location and period	Characteristics of cases	Characteristics of controls	Detection method	Exposure categories	No. of exposed cases	Relative risk* (95% CI)	Adjusted potential confounders	Comments
Grandis <i>et al</i> (1997) USA 1981–1993	21 cases of squamous cell carcinoma of head and neck (SCCHN) including 9 oral cavity, 1 oropharynx, 2 hypopharynx, 9 larynx. Cases provided serum between 1981-93 and serum stored -70°C. Mean age 62.4±10 years.	21 controls who had undergone nononcologic head and neck procedures at same institution as cases were randomly selected and matched to cases by sex and date of birth (±5 years).	Serology/ELISA Anti <i>H.pylori</i> IgG	<i>H.Pylori</i> + <i>OD</i> ≥2.0	12	[0.82 (0.24–2.76)]	None	Small hospital based study.
Aygenç <i>et al</i> (2001) Turkey	26 male cases with squamous cell carcinoma of larynx aged 49-68, all smokers. Treated in 1998 and 1999	32 male patients with no history of any carcinoma, aged 49-68, all smokers.	Serology/ELISA Anti <i>H.pylori</i> IgG	<i>H. pylori</i> + ≥ 1.10 <i>ISR</i>	19	[3.97 (1.32–11.89)]	None	Small sample size. No data on dose and duration of smoking.
Rubin <i>et al</i> (2003) UK	61 cases with severe dysplasia of larynx (n=6) or with invasive squamous cell carcinoma of upper aerodigestive tract, excluding oesophagus, (55) 31 aged ≤61 30 aged > 62	187 subjects age and sex matched to cases. 125 aged ≤61 62 aged > 62	Serology/ELISA Anti <i>H.pylori</i> IgG	<i>Optical density</i> ( <i>measured at 450nm</i> ) > 0.10 <i>positive</i>	All cases 38  Aged ≤61 19  Aged >62 10	[1.86 (1.03–3.35)]  [2.22 (0.93–5.38)]  [1.44 (0.59–3.54)]	None	Selection of controls not described. No data on smoking.
Nurgalieva <i>et al</i> (2005) USA	119 cases with histologically confirmed squamous cell carcinoma of laryngopharynx; laryngeal cancer, n=46; pharyngeal cancer, n=73. Cases diagnosed 1996–2002.	111 cancer free visitors to hospital (friends and relatives of patients at institution)	Serology/ELISA Anti <i>H.pylori</i>	<i>Optical density</i> <i>Positive</i> >2.2 <i>EU</i>	All cases 39  Larynx only 18  Pharynx only 21	1.27 (0.70–2.29)  1.53 (0.69–3.41)  1.09 (0.55–2.16)	Age (± 5yrs), Sex, smoking (ever smoked >100 cigs in lifetime) and alcohol (1+ drinks/wk for >1yr)	No significant difference in <i>H.pylori</i> zero positivity by HPV-16 serology status.