**Table 1.** Results of the multivariate analysis considering the appearance of pharyngocutaneous fistula as the dependent variable

|  |  |  |
| --- | --- | --- |
| Parameter | Odds ratio (CI 95%) | *P*-value |
| Gender |  |  |
| – Men | 1 |  |
| – Women | 0.73 (0.12–4.44) | 0.737 |
| Age |  |  |
| – <60 years | 1 |  |
| – 60–70 years | 0.98 (0.34–2.84) | 0.976 |
| – >70 years | 1.05 (0.31–3.52) | 0.927 |
| Tobacco& alcohol use |  |  |
| – Severe | 1 |  |
| – Moderate | 1.06 (0.29–3.89) | 0.923 |
| – No | 0 | 0.999 |
| Location |  |  |
| – Supraglottis | 1 |  |
| – Glottis | 1.45 (0.45–4.65) | 0.524 |
| – Hypopharynx | 1.82 (0.30–11.05) | 0.514 |
| pT |  |  |
| – 4 | 1 |  |
| – 3 | 0.53 (0.19–1.48) | 0.230 |
| – 2 | 0.50 (0.17–1.43) | 0.199 |
| – 0 | 0 | 0.999 |
| Type of surgery |  |  |
| – Simple total laryngectomy | 1 |  |
| – Total laryngectomy + pharyngectomy | 2.55 (0.54–12.06) | 0.236 |
| Neck dissection |  |  |
| – Bilateral | 1 |  |
| – Unilateral | 1.19 (0.49–2.91) | 0.694 |
| – No | 0.44 (0.04–4.22) | 0.479 |
| Type of radiotherapy |  |  |
| – Radiotherapy | 1 |  |
| – Chemoradiotherapy | 1.28 (0.43–3.84) | 0654 |
| Interval between radiotherapy & total laryngectomy |  |  |
| – <6 months | 1 |  |
| – 6 months to 1 year | 1.06 (0.25–4.45) | 0.929 |
| – 1–5 years | 1.80 (0.50–6.48) | 0.364 |
| – >5 years | 1.68 (0.23–11.91) | 0.604 |
| Indication of surgery |  |  |
| – Salvage surgery | 1 |  |
| – 2nd neoplasm | 0.48 (0.10–2.30) | 0.486 |
| – Chondronecrosis | 0 | 0.999 |

CI = confidence interval; pT = pathological tumour size staging

**Table 2.** Results of the multivariate analysis considering the appearance of major pharyngocutaneous fistula as the dependent variable

|  |  |  |
| --- | --- | --- |
| Parameter | Odds ratio (CI 95%) | *P*-value |
| Gender |  |  |
| – Men | 1 |  |
| – Women | 0.32 (0.03–3.41) | 0.347 |
| Age |  |  |
| – <60 years | 1 |  |
| – 60–70 years | 1.17 (0.38–3.57) | 0.775 |
| – >70 years | 1.00 (0.27–3.71) | 0.998 |
| Tobacco & alcohol use |  |  |
| – Severe | 1 |  |
| – Moderate | 0.50 (0.09–2.58) | 0.504 |
| – No | 0 | 0.999 |
| Location |  |  |
| – Supraglottis | 1 |  |
| – Glottis | 1.53 (0.43–5.40) | 0.502 |
| – Hypopharynx | 0.93 (0.13–6.45) | 0.948 |
| pT |  |  |
| – 4 | 1 |  |
| – 3 | 0.57 (0.18–1.79) | 0.575 |
| – 2 | 0.86 (0.28–2.62) | 0.866 |
| – 0 | 0 | 0.999 |
| Type of surgery |  |  |
| – Simple total laryngectomy | 1 |  |
| – Total laryngectomy + pharyngectomy | 3.84 (0.72–20.50) | 0.115 |
| – Neck dissection |  |  |
| – Bilateral | 1 |  |
| – Unilateral | 1.36 (0.53–3.45) | 0.518 |
| – No | 0 | 0.998 |
| Type of radiotherapy |  |  |
| – Radiotherapy | 1 |  |
| – Chemoradiotherapy | 1.32 (0.42–4.16) | 0.632 |
| Interval between radiotherapy & total laryngectomy |  |  |
| – <6 months | 1 |  |
| – 6 months to 1 year | 0.82 (0.19–3.55) | 0.798 |
| – 1–5 years | 1.74 (0.47–6.41) | 0.404 |
| – >5 years | 0.61 (0.06–6.14) | 0.677 |
| Indication of surgery |  |  |
| – Salvage surgery | 1 |  |
| – 2nd neoplasm | 0.47 (0.08–2.73) | 0.404 |
| – Chondronecrosis | 0 | 0.999 |

CI = confidence interval; pT = pathological tumour size staging