

## Clinicopathological parameters and outcome of 245 patients operated for oral squamous cell carcinoma

Paolo GARZINO-DEMO<sup>1</sup>, Alessandro DELL'ACQUA<sup>1</sup>, Paola DALMASSO<sup>2</sup>, Massimo FASOLIS<sup>1</sup>, Gian Marco LA TERRA MAGGIORE<sup>1</sup>, Guglielmo RAMIERI<sup>1</sup>, Sid BERRONE<sup>1</sup>, Monica RAMPINO<sup>3</sup>, Marina SCHENA<sup>4</sup>

<sup>1</sup>Division of Maxillofacial Surgery (Head: Prof. Sid Berrone, MD, DDS); <sup>2</sup>Division of Epidemiology of Tumours (Head: Prof. Franco Merletti, MD, DDS); <sup>3</sup>Division of Radiation Therapy (Head: Prof. Umberto Ricardi, MD, DDS); <sup>4</sup>Division of Oncology (Head: Prof. Oscar Bertetto, MD, DDS), S. Giovanni Battista Hospital, University of Turin, Italy

**SUMMARY.** Introduction: This report analysed the outcome of patients undergoing surgery for oral squamous cell carcinoma in order to identify the prognostic value of several factors. Patients: A total of 245 patients were studied who had undergone surgery for oral squamous cell carcinoma between 1989 and 2002, of whom 109 had received postoperative radiation therapy. Methods: For each patient, personal data, alcohol and tobacco consumption, symptoms, histological findings, treatment, and outcome were recorded and analysed statistically. Survival curves were calculated using the Kaplan–Meier algorithm, and the difference in survival among subgroups was examined. Results: The overall 5-year survival rate in the 245 patients was 63% (72.5% at 3 years). The differences in the 5-year survival were significant ( $p < 0.05$ ) for the site of origin, N and pN status, TNM stage, grading, status of the resection margins, osseous infiltration, and perineural invasion. Vascular involvement as a discriminator was not statistically significant. In patients undergoing radiation therapy, only perineural invasion negatively influenced the 5-year survival prognosis ( $p < 0.01$ ). Conclusion: The overall survival rate was within the (previously) reported range. The prognostic value of many parameters is widely recognized; the combined evaluation of 'composite factors' is promising. © 2006 European Association for Cranio-Maxillofacial Surgery

**Keywords:** oral carcinoma; oncology; prognostic factors; survival rate; surgery

### INTRODUCTION

Despite changes in the treatment of oral squamous cell carcinoma over the last few decades, the prognosis remains uncertain. Curability depends on the stage and specific site of the tumour (Carinci et al., 1997). The status of the cervical nodes is the single most important prognostic indicator for survival of patients with oral cancer (Denis et al., 2001; Tankere et al., 2000; Woolgar, 1997). Over the last 20 years, there has been a slight decrease in mortality rates, but the reported results are heterogeneous and the overall 5-year survival rate varies from 41% to 79.5%. Surgery remains the mainstay of treatment; other therapies include radiation and chemotherapy, which may be used as an adjunct or for palliation (Charabi et al., 1997).

This report assessed the outcome in a series of 245 patients with the diagnosis of oral squamous cell carcinoma. The results were analysed to identify prognostic factors (Beenken et al., 1999; Davis, 1985; Hibbert et al., 1983; Martinez-Gimeno et al., 1995).

### PATIENTS

Between 1989 and 2002, 245 patients with a diagnosis of oral cancer underwent treatment in the Division of Maxillofacial Surgery of the University of Turin and form the basis of this study. The patient population comprised 151 men (62%) and 94 women (38%), a gender ratio of 1.6:1. Their mean age was  $62.0 \pm 11.7$  years (range 24–89 years), with a significant statistical difference ( $p = 0.002$ , confidence interval (CI) 95%: 1.9–7.8) between males ( $60.2 \pm 11.8$ ) and females ( $65.0 \pm 11.0$  years). All patients were Caucasians. One hundred and nine patients underwent radiation therapy postoperatively (in the Division of Radiotherapy of the University of Turin).

The sites in the oral cavity were divided into subsites: the lateral border of the tongue was divided into anterior (2/3 anterior border) and posterior (1/3 posterior border) parts. The buccal mucosa (cheek) was separated into the buccal mucosa, buccal mucosa-retromolar trigone, and buccal mucosa-maxillary gingiva. In the floor of mouth, only the anterior and intermediate parts were considered, as it

is difficult to separate the posterior part from the posterior part of the tongue.

Table 1 shows the distribution of tumours according to site and stage. The tongue (95 cases, 39%) and the floor of the mouth (45 cases, 18%) were the sites most commonly involved. The types of intervention

according to site are reported in Table 2. The primary treatment for patients involved surgery in all cases: 88 (36%) were managed by local excision alone, while 157 cases (64%) were treated with 'en bloc' surgery of the primary tumour in continuity with neck dissection (Persky and Lagmay, 1999). Unilateral neck

**Table 1** – Clinicopathological parameters and cumulative survival at 3 and 5 years

	No. of cases	Three years from diagnosis		Five years from diagnosis		Log-rank Chi square
		Cumulative survival (%)	95 CI%	Cumulative survival (%)	95 CI%	
Overall	245	72.52	66.2–77.85	63.19	56.14–69.43	
<i>Gender</i>						
Male	151	66.98	58.54–74.09	57.30	48.31–65.30	6.28 ( <i>p</i> = 0.01)
Female	94	81.55	71.58–88.30	73.07	61.25–81.81	
<i>Site</i>						
Tongue (1/3 post)	49	55.08	39.20–68.41	46.72	31.00–61.00	12.85 ( <i>p</i> = 0.0454)
Tongue (2/3 ant)	46	88.67	74.87–95.12	74.85	58.04–85.71	
Mandibular gingiva	43	73.54	55.94–84.99	69.22	50.38–82.08	
Buccal mucosa	31	71.79	51.23–84.85	71.79	51.23–84.85	
Buccal-retromolar trigonum	15	60.00	31.76–79.65	52.50	25.24–73.97	
Buccal-maxillary gingiva	16	74.04	44.64–89.40	65.81	35.78–84.34	
Floor of mouth	45	77.03	61.45–86.95	62.89	45.75–75.96	
<i>Stage</i>						
I	79	94.24	85.32–97.81	79.94	67.15–88.18	47.68 ( <i>p</i> < 0.0001)
II	58	91.93	79.80–96.91	78.18	61.77–88.18	
III	31	51.61	33.04–67.36	48.39	30.18–64.41	
IVa	76	46.19	34.51–57.08	42.12	30.25–53.51	
<i>Clinical N(N)</i>						
N0	174	86.21	79.78–90.72	74.64	66.38–81.16	51.71 ( <i>p</i> < 0.0001)
N1	34	46.12	28.79–61.82	39.46	22.93–55.60	
N2	36	34.07	18.96–49.80	34.07	18.96–49.80	
<i>pN status</i>						
Nx	85	89.65	80.30–94.70	74.86	62.38–83.73	53.25 ( <i>p</i> < 0.0001)
N–	89	82.85	72.69–89.50	74.89	63.24–83.33	
N+	64	43.75	31.15–55.65	39.39	26.87–51.65	
N+ with ECS	7	14.29	0.71–46.49	14.29	0.71–46.49	
<i>Grading</i>						
G1	78	84.26	73.24–91.02	74.33	61.07–83.65	8.33 ( <i>p</i> < 0.0155)
G2	133	68.89	60.07–76.15	59.16	49.68–67.44	
G3	27	55.82	34.34–72.76	50.75	29.44–68.65	
<i>TRM</i>						
Pos	24	57.35	35.19–74.38	47.65	26.31–66.25	4.34 ( <i>p</i> < 0.0372)
Neg	221	74.23	67.63–79.69	65.01	57.56–71.49	
<i>Osseous invasion</i>						
Yes	57	57.57	43.64–69.22	52.59	38.27–65.05	6.32 ( <i>p</i> < 0.0120)
No	188	77.31	70.23–82.91	66.57	58.39–73.51	
<i>Perineural invasion</i>						
Yes	62	47.61	34.65–59.46	42.13	29.49–54.24	21.80 ( <i>p</i> = 0.0001)
No	183	81.73	75.01–86.81	70.96	62.69–77.71	
<i>Vascular infiltration</i>						
Yes	25	52.00	31.25–69.24	52.00	31.25–69.24	3.54 ( <i>p</i> = 0.0597)
No	220	75.02	68.43–80.43	64.60	57.08–71.13	
<i>Radiation therapy</i>						
Yes	109	52.60	42.60–61.65	46.36	36.21–55.89	30.57 ( <i>p</i> = 0.0001)
No	136	89.70	82.88–93.91	77.72	68.31–84.64	

CI = Confidence interval.

ECS = Extranodal spread.

TRM = Tumour resection margin.

Download English Version:

<https://daneshyari.com/en/article/3144425>

Download Persian Version:

<https://daneshyari.com/article/3144425>

[Daneshyari.com](https://daneshyari.com)