

Patterns of Distant Failure and Predictors of Overall Survival in Metastatic Oral Cavity Squamous Cell Carcinoma

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Background

Local metastasis-directed therapy (MDT) has emerged as a promising treatment paradigm for oligometastatic cancer. However, head and neck cancer patients have been excluded from MDT trials due to poor prognosis after distant metastasis (DM). We hypothesized that there exists a subset of oral cavity squamous cell carcinoma (OCSCC) patients with extended survival after DM. Therefore, we sought to identify factors associated with overall survival (OS) after DM in OCSCC, which may be used as eligibility criteria in future MDT trials.

Methods

- Retrospective cohort study using a single-institution database of over 4,800 head and neck cancer patients treated from 1990 to 2019
- Filtered for OCSCC patients who failed distantly after definitive treatment
- Univariable and multivariable Cox proportional hazards regression models were used to interrogate the association of patient, tumor, and treatment characteristics with OS

Results

	Patient Characteristics (N=47)	
	Number	%
Male	26	55.3
Median Age (Yr)	63.5	-
White Race	39	88.6
Smoker	7	14.9
	Tumor Characteristics	
Median Time to DM (Yr)	1.1	-
Locoregional Fail	41	87.2
Symptoms at DM	36	76.6
	# Metastatic Lesions	
1	10	21.3
2-4	13	27.7
>4	24	51.1
	Sites of Metastasis	
Lung	29 (61.7)	61.7
Skin/Lymphatics	12 (25.5)	25.5
Bone	11 (23.4)	23.4
	Treatment Characteristics	
Primary Surgery	44	93.6
MDT	6	12.8
Systemic Therapy	20	42.6
	Survival from DM (Median OS 3.1 months)	
1 years	10	21.3
2 years	5	10.6
3 years	4	8.5

Conclusion

- Majority of OCSCC patients with DM had 5+ distant lesions and concurrent/preceding locoregional failure
- Most common site of DM was the lung
- Median survival from DM was 3.1 months
- Patients selected for systemic therapy had improved survival in our study
- The discovery of a limited number of asymptomatic lesions may prove useful in identifying patients with superior prognosis who are appropriate for MDT
- Additional larger and prospective studies are required to evaluate benefit of MDT in OCSCC