

Introduction

- Mental health disorders (MHDs) have been shown to adversely impact the overall course of patients with cancer and has been shown to correlate with worse subsequent survival.¹ This has been found to be true for depression and anxiety as well as schizophrenia and schizoaffective disorder.¹
- This outcome has been demonstrated among those with cancers of the breast, uterine, and colon.^{2,3} However, there is a lack of research the impact of MHDs has on patients with head and neck cancer (HNC).
- We hypothesized that patients with squamous cell carcinoma, with concurrent MHD would present at a later stage compared to HNC patients without MHD and may receive different oncologic treatments.

Objective

- To determine if patients with comorbid MHD would present at a later stage or receive different oncologic treatments in comparison to HNC patients without MHD.

Methods

- A single center retrospective review was performed of patients diagnosed with head and neck squamous cell carcinoma from January 1, 2011 to January 1, 2019.
- Patients diagnosed with MHD after HNC diagnosis were excluded from the study.
- Patients with alcohol and drug use disorder without associated MHD diagnosis were excluded
- Univariate analysis was performed using two sample t-test for continuous variables and chi-squared for categorical variables.
- Multivariate analysis was performed using logistic regression analysis.

Results

- A total of 985 subjects were included in the study. 156 (15.8%) patients had a diagnosis of MHD prior to diagnosis of head and neck squamous cell carcinoma.
- 56 (5.7%) had depression, 29 (2.9%) had anxiety, 39 (4.0%) had both depression and anxiety, and 36 (3.7%) had other psychiatric disorders (PTSD, bipolar, mood, panic, schizophrenia, psychosis, personality disorders).
- On univariate analysis, patients with depression and anxiety were associated with a later stage of HNC diagnosis (p = 0.0267).
- However, after adjusting for multiple covariates, there was no significant association between both depression and anxiety and stage at diagnosis (Table 1).
- Patients with pre-existing depression were less likely to be treated with surgery on both univariate (p=0.0046) and multivariate analysis (Table 2).

Table 1. Multivariate Analysis evaluating the association between psychiatric diagnosis and late stage at time of diagnosis

Variable	Odds Ratio	95% Confidence Interval	p-value
Diagnosis of Depression & Anxiety	2.048	(0.849, 4.940)	0.1104
≥65 years	0.488	(0.347, 0.686)	<0.0001
Male	0.859	(0.598, 1.235)	0.4126
White (race)	0.398	(0.182, 0.870)	0.0013
Black (race)	0.752	(0.316, 1.792)	0.5513
Primary Site			
Larynx	0.217	(0.111, 0.422)	0.0002
Oral Cavity	0.175	(0.096, 0.319)	<0.0001
Oropharynx	0.718	(0.356, 1.447)	0.0023

Results

Table 2. Multivariate Analysis evaluating the association between psychiatric diagnosis and surgical treatment versus non-surgical treatment

Variable	Odds Ratio	95% Confidence Interval	p-value
Depression only	0.384	(0.219,0.820)	0.011
≥65 years	0.725	(0.499, 1.075)	0.112
Male	1.256	(0.877,1.954)	0.187
White race	3.511	(1.814, 6.644)	<0.0001
Black race	0.942	(0.493, 2.002)	0.009
Married	2.2263	(1.489, 3.266)	<0.0001
Public Insurance	1.038	(0.697,1.498)	0.912
Primary Site			
Larynx	0.703	(0.406,1.191)	<0.0001
Oral Cavity	4.634	(2.733, 7.854)	<0.0001
Oropharynx	0.827	(0.503, 1.402)	0.003

Conclusion

- Although MHD diagnosis was associated with later stage of presentation on univariate analysis, this association was not supported on multivariate analysis.
- Concurrent depression was associated with a lower likelihood of surgical treatment.

References

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