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The Prevalence of Untreated Obstructive Sleep Apnea in Patients Treated for Head and Neck Malignancy

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Introduction

- Obstructive sleep apnea (OSA) prevalence is estimated to be 3-7% in the general population, with the vast majority of those with the disorder undiagnosed.¹
- Untreated OSA is associated with increased cardiovascular morbidity and decreased quality of life.²
- There is increased prevalence of OSA (ranging from 12-96%) and overall poorer sleep quality in patients who have been treated for head and neck cancer.^{3,4} Thus, this population may suffer from an even higher prevalence of untreated OSA.

Objectives

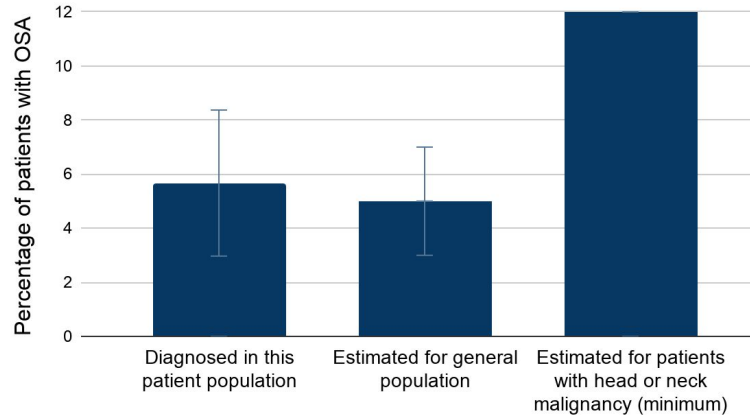
- To measure the prevalence of untreated OSA in patients treated for head and neck malignancy.
- To study possible indicators for screening OSA in patients by examining possible correlations between OSA symptoms and patient sex, age, or BMI.

Methods

- Used UC Davis electronic medical records to retrospectively review the charts of 282 patients who underwent surgery for head or neck malignancy, from 2016 through 2018.
- Recorded whether OSA screening, diagnosis, treatment, or symptoms were present in each patient record.
- Ran statistical tests to determine if there was significant relationships between the presence of OSA symptoms and patient sex, age, and BMI.
- Patient population included 198 males and 84 females, with an average age of 64 (range 26-89) and BMI of 26.9.

Results

Percentage of Patients with Obstructive Sleep Apnea



Total # of patients diagnosed with OSA	16	Outcomes of the 38 patients with indications of potential OSA	
Diagnosed before surgery	15	Already diagnosed for OSA	1
Diagnosed after surgery	1	Screened and treated for OSA	1
Total # of patients with ≥1 OSA symptoms	38	Not screened for OSA	36
Fatigue or daytime tiredness	27		
Decreased sleep quality or excessive waking	17		
Increased snoring	1		

	Patients w/ Symptoms	Patients w/o Symptoms	P-value, Significant?
Males:			
Females	27:11	171:73	.90 No
Average Age	66.71	63.73	.14 No
Average BMI	25.42	25.95	.48 No

Discussion

- The percentage of patients diagnosed for OSA was in line with the general population prevalence but below the lowest estimated prevalence for patients with head and neck cancer, so likely a significant number of patients went undiagnosed and untreated.
- Many patients with recorded OSA symptoms were not screened for OSA, further indicating that a substantial number of patients remained undiagnosed for OSA.
- The number of patients with OSA symptoms who were not screened was likely still underreported, since absence of recorded symptoms could be from lack of asking.
- Since there was no significant correlation between OSA symptoms and patient sex, age, or BMI, these factors should not be strong deciding factors for screening in patients with head and neck malignancy.
- Important future research includes exploring why patients with symptoms were not screened for OSA, and developing clinical interventions to effectively increase screening for OSA, which will help diagnose OSA and improve patient quality of life.

References

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