Suicide-Related Behavior After the Diagnosis of Obstructive Sleep Apnea

To the Editor: Studies[1,2] have shown an increased risk of suicide-related behavior following cancer diagnosis. This risk probably stems from the expectation of cancer as a major traumatic experience, and preexisting psychiatric disorders increase this risk. To my knowledge, the following case is the first in which a patient attempted suicide after receiving an obstructive sleep apnea (OSA) diagnosis.

Case report. Mr A is a 23-year-old Hispanic man with posttraumatic stress disorder and major depressive disorder well managed with fluoxetine, prazosin, and quetiapine. He had 3 prior suicide attempts, all before 12 years of age. He was referred for polysomnography due to snoring, witnessed apneas, and daytime sleepiness. Polysomnography revealed severe OSA (*International Classification of Sleep Disorders, Third Edition*[3]) with an apnea-hypopnea index of 37.7. During the sleep study, he experienced significant improvement in OSA with use of continuous positive airway pressure (CPAP) of 8 cm H_2O, but he did not receive the official diagnosis of OSA at that time.

A week later, he was notified that he had severe OSA, "stopped breathing" 37 times an hour, and needed a CPAP machine. No further explanation was given. Mr A always considered OSA a serious illness, commenting "When I was in the military, anybody who was diagnosed with sleep apnea automatically got 30% to 50% service-connected disability." Subsequent to that phone call, he became so demoralized that he stopped taking his psychotropic medications, decided to quit his job, and acquired a gun to kill himself. He took the gun home, laid it on the table, and started thinking (in sober state) of loading it with suicidal intent. However, being a father of 2 young children, ages 3 and 4 years, he decided against suicide. He continued to have suicidal ideations that resulted in psychiatric evaluation in the emergency department a few days later, but he was discharged after evaluation due to lack of imminent danger. He then met with a health provider in our clinic on the same day, where he was educated about his diagnosis of OSA. It was explained to him that OSA was an extremely common condition with good outcomes to treatment. He had immediate abatement of his suicidal ideations and resumed his psychotropic regimen. Mr A also initiated CPAP, with resolution of snoring and significant improvement in his sleep quality, daytime sleepiness, and daytime energy level. He experienced no CPAP intolerance.

A study[1] indicated that cancer diagnosis can lead to suicide-related behavior after adjusting for coexistent psychiatric disorders, and the risk was highest within first 3 months of new cancer diagnosis. Additional studies[2] have demonstrated this increased risk following cancer diagnosis. OSA diagnosis leading to suicide-related behavior is previously unknown.

In this case, an OSA diagnosis probably caused suicide-related behavior, because depression was minimal and suicidal ideations were absent prior to OSA diagnosis and resolved after the patient received further education about diagnosis and management OSA. The patient felt demoralized after receiving the OSA diagnosis, especially when told that he "stopped breathing" 37 times during sleep, because he assumed that any night could be his last, that he could die in his sleep. A correlational study[4] in cancer patients showed that demoralization had more influence on suicidal ideations than did depression. Demoralization could have been prevented in this case by further education about diagnosis and management of OSA, especially since polysomnography indicated that CPAP therapy was particularly effective for this patient, demonstrating significant improvement in OSA at a relatively low CPAP setting.

Adolescents and young adults are vulnerable for suicide-related behavior due to underdeveloped coping strategies to deal with stress.[2] Diagnosis of severe OSA may be perceived as a stressful event. Given the high prevalence of OSA, and high prevalence of OSA as comorbidity in psychiatric patients,[5] further study of the relationship between OSA diagnosis and suicide-related behavior is warranted. Comprehensive patient education about diagnosis and management of OSA is critical, because in some psychiatric patients, even such a diagnosis may contribute to suicide-related behavior.

References

1. Bolton JM, Walld R, Chateau D, et al. Risk of suicide and suicide attempts associated with physical disorders: a population-based, balancing score-matched analysis. *Psychol Med*. 2015;45(3):495–504.
2. Lu D, Fall K, Sparén P, et al. Suicide and suicide attempt after a cancer diagnosis among young individuals. *Ann Oncol*. 2013;24(12):3112–3117.
3. American Academy of Sleep Medicine. *International Classification of Sleep Disorders*. 3rd ed. Darien; IL: 2014.
4. Fang CK, Chang MC, Chen PJ, et al. A correlational study of suicidal ideation with psychological distress, depression, and demoralization in patients with cancer. *Support Care Cancer*. 2014;22(12):3165–3174.
5. Gupta MA, Simpson FC. Obstructive sleep apnea and psychiatric disorders: a systematic review. *J Clin Sleep Med*. 2015;11(2):165–175. https://dx.doi.org/10.5664/jcsm.4466

Piyush Das, MD[a]
drpiyushdas@yahoo.com

[a]Mental Health Clinic, VA Medical Center, Grand Island; and Department of Psychiatry, Creighton University Medical Center, Omaha, Nebraska

Potential conflicts of interest: The author declares no conflicts of interest or sources of external funding.

Funding/support: The author declares no source of external funding.

Disclaimer: The views expressed in this letter are those of the author and do not necessarily represent the views of the US Department of Veterans Affairs.

Published online: February 9, 2017.

Prim Care Companion CNS Disord 2017;19(1):16l01995
https://doi.org/10.4088/PCC.16l01995