



# Obstructive Sleep Apnea Awareness

## Case Vignette: OSA and Suicidal Ideation

### Presenting Complaints

A 74-year-old man presented to his primary care physician with, severely depressed mood, hopelessness, anhedonia, fatigue, and intense suicidal ideation with active planning. He identified 3 different potentially lethal plans to end his life and had recently been revising his will. He also mentioned that he suffers from severe excessive sleepiness in the daytime, disruptive snoring, and poor quality sleep at night. The patient was unaccompanied and refused contact with his family.

### Past History

The patient had no past psychiatric history. There were no previous episodes or family history of depression. Patient is an ex-smoker and consumed one alcoholic drink a day; there was no past history of alcohol problems.

### Physical Exam

An emergency outpatient psychiatry consultation was arranged. Despite the patient's request that information not be conveyed to family members, the situation was judged to be a medical emergency and in accordance with Health Insurance Portability and Accountability Act (HIPAA), the patient's wife was contacted and asked to become involved.

This patient's depression met DSM-IV criteria for major depression based on depressed mood, poor concentration, anhedonia, hopelessness, poor energy, and poor sleep. There were no previous episodes or family history of depression. The patient declined psychiatric hospitalization. The patient denied that he intended to attempt suicide in the next one to two days, so involuntary psychiatric hospitalization was not feasible based on Arizona law. Because of religious beliefs, the patient also rejected antidepressant medications after a long discussion about the role of these medications in the treatment of depression.

- BMI- 32.5
- Blood tests including full blood count, renal, liver, and thyroid functions, electrolytes, vitamin B12, and folate were within the normal range.
- Previously obtained overnight oximetry, with a nadir of 59% saturation, was suggestive of obstructive sleep apnea, but polysomnography was pending.



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## Testing

The primary care physician asked him to complete the Epworth Sleepiness Questionnaire to assess his daytime somnolence.

*The ESS subjectively assesses excessive daytime sleepiness by asking patients to rate their chance of dozing off from 0 (would never doze) to 3 (high chance of dozing) for 8 commonly encountered scenarios, with a total maximal score of 24.*

Would never doze	Slight chance of dozing	Moderate chance of dozing	High chance of dozing	
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Sitting and reading
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Watching TV
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Sitting inactive in a public place (e.g. cinema or in a meeting)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Being in a car for an hour as a passenger (without a break)
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Lying down to rest in the afternoon (when possible)
<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	Sitting and chatting to someone
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Sitting quietly after lunch (not having had alcohol)
<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	In a car when you stop in traffic for a few minutes
<input type="button" value="Calculate Score"/>				
Your Score				
19				

**Figure 1. Results of Epworth Sleepiness Score**

### Test results:

The ESS score generated was 19/24 (Figure 1). A score in the range of 16-24 is interpreted as severe Excessive Daytime Sleepiness. [About the ESS]

## Discussion of Treatment Plan

The patient agreed that his sleep disturbance was his single most distressing factor. He conceded a measure of hope that his life was worth living if he could maintain alertness during



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the day and sleep better at night. A consultation with a sleep physician was integrated into his management.

Following the sleep physician's consultation, nCPAP was initiated utilizing a loaned self-titrating unit, resulting in markedly improved sleep. The first morning the patient described less intense suicidal ideation, and the patient continued to use the auto-PAP device for the next 3 nights.

The patient then also agreed to a sleep study with interim use of an nCPAP device and outpatient follow-up. A split-night sleep study was ordered. It revealed an apnea hypopnea index (AHI) of 64, arousal index of 91, and oxygen saturation nadir of 65%. Initial REM latency was 120 minutes and arousal index 91 (85% respiratory related). In the laboratory when nCPAP was titrated to 12 cm H<sub>2</sub>O, his sleep improved.

### Outcome of Case

The patient was closely monitored with telephone calls and office visits, and he described progressive improvement in his depressed mood. He was very pleased with his improved quality of sleep with nCPAP, which he used consistently. He added that he felt more rested and much less tired. His energy level was good, and he no longer took daytime naps.

Two weeks after the sleep study, the patient denied all residual symptoms of depression. Follow-up at 1, 2, and 3 months confirmed ongoing remission.

### Teaching Points

Excessive daytime sleepiness is a significant public health concern, with obstructive sleep apnea being a common cause, and a particular relationship exists with the severity of depression. This patient appeared hopeless about his situation, made alarming statements about suicide plans, and refused contact with family; however he was judged not to be at imminent risk. This patient had some modest hope about intervention for his sleep symptoms, willing to undergo a sleep study and try treatment.

Many older adults believe that poor sleep is a natural part of the aging process. However, sleep disorders, such as OSA, should be suspected and investigated in older adults who may present with ambiguous symptoms, such as fatigue or nocturia and no obvious risk factors.

This case report also highlights the importance of considering other diagnoses when assessing patients with neuropsychiatric symptoms. Underlying medical disorders or sleep disorders need to be identified and treated to optimize treatment of the mental illness. Excessive daytime



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sleepiness, which is the main symptom of OSA, overlaps with those of many severe mental illnesses. For patients without an assessment for OSA but presenting with depression and sleepiness, the presence of OSA should be suspected. Repetitive arousal or oxygen desaturation in brain tissue during sleep presumably contributes to the development of depression and sometimes suicidal ideation as in the case of this gentleman. Because patients with OSA may present with depressive and cognitive symptoms, which may mimic a primary psychiatric condition, it is of crucial importance to search for OSA signals when accessing those patients.

**Adapted from:** Krahn LE, Miller BW, Bergstrom LR. [Rapid resolution of intense suicidal ideation after treatment of severe obstructive sleep apnea.](#) *J Clin Sleep Med.* 2008 Feb 15;4(1):64-5. PMID: 18350966; PMCID: PMC2276837.

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## Additional Reading

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