

## Case study: Improvements in depression symptoms post CPAP use in a patient with obstructive sleep apnea and schizoaffective disorder bipolar type

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### Introduction

A 27-year-old female with schizoaffective disorder bipolar type, a body mass index (BMI) of 62.3 and obstructive sleep apnea (OSA) was admitted to an inpatient psychiatric unit for suicidal ideation and auditory hallucinations.

### Case details

She was compliant with psych medications but non-compliant with her continuous positive airway pressure (CPAP) machine prior to admission. She began use of the CPAP machine 3 days after admission. Two days after she began using the CPAP, she no longer expressed suicidal ideation and there was a noticeable improvement in her sleep and energy. She was started on Abilfy, Vistaril, Prozac, and melatonin.

### Discussion

Studies suggest that the two main suspected factors for depressive symptoms in OSA is sleep fragmentation and oxygen desaturation during sleep (1). One clinic-based prevalence study demonstrated that the prevalence of OSA was 3.2% in 93 subjects, with schizoaffective disorder (2). Another case study showed that post CPAP treatment in a patient diagnosed with OSA and schizoaffective disorder bipolar type displayed significant improvement in depression and fatigue scores, and in the Total Mood Disturbance scale.(3 )This study showed that in the case of Mr. G, it could have been one of the contributing factors to his long-standing complaints of depression.

### Image A (top), Image B (bottom)



### Signs and Symptoms of Depression



Persistent feelings of sadness



Loss of interests in activities



Trouble sleeping or oversleeping



Appetite or weight changes



Fatigue or decreased energy



Difficulty thinking clearly or quickly



Irritability, frustration, or pessimism



Physical aches and pains



Recurrent thoughts of death or suicide

### Conclusion

These cases suggest an improvement in depression symptoms with appropriate treatment of OSA. There is a need for further study to demonstrate if there is a similar link between patients with schizoaffective disorder bipolar type related depression symptoms in patients with OSA.

### References

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- Image A (cpap) <https://www.drugs.com/cg/images/en3565026.jpg>
- Image B (depression signs and symptoms) <https://static.psychom.net/wp-content/uploads/2021/05/Signs-and-Symptoms-of-Depression-731x1024.png>