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July 2023 Sleep Case of the Month: Fighting for a Good Night's Sleep

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A 31-year-old man presented for follow-up in the Sleep Medicine clinic. He has a past medical history of a seizure disorder and supraventricular tachycardia (SVT) and was referred after complaining of excessive daytime sleepiness. Current medications include citalopram and diltiazem. Four months prior, he was diagnosed with severe obstructive sleep apnea characterized by an apnea-hypopnea index (AHI) of 34 and an oxygen saturation nadir of 86%. The patient was initiated on continuous positive airway pressure (CPAP) therapy; however, he reported ongoing mask discomfort and difficulty with exhalation while wearing CPAP. Despite partial improvement in sleep fragmentation and daytime sleepiness, the patient reported sleeping for only 4 hours per night. The patient's sleep schedule was irregular, with bedtime ranging between 9:30 pm and 12 am, waking up at 5 am, and taking a daily nap for 4-5 hours in the morning during which he continued to use CPAP. Additionally, he described experiencing episodes of waking up from dreams, often screaming or throwing punches. A score of 15 on the Epworth Sleepiness Scale (ESS) indicated significant daytime sleepiness.

What should be *done next?*

1. Begin oxygen at night

2. Begin self-titrating CPAP
3. Discontinue diltiazem
4. Neurology referral
5. Overnight laboratory polysomnography

Correct!

5. Overnight laboratory polysomnography

The patient's initial diagnostic assessment revealed severe obstructive sleep apnea, which supported the initiation of CPAP therapy. The patient's excessive daytime sleepiness could be attributed to OSA, sleep fragmentation from dream enactment behavior, idiopathic hypersomnia, narcolepsy, delayed sleep phase, insufficient sleep syndrome, nocturnal seizure, or iatrogenic impact of seizure medication. The persistent symptoms of sleep fragmentation, dream enactment behavior, and excessive daytime somnolence warranted further evaluation with attended lab polysomnography to record the patient's sleep while he was using CPAP. This study showed resolution of apneic events with use of the CPAP machine. Despite adequate control of the patient's sleep apnea, the following two images are examples of REM without atonia and Dream Enactment Behavior. Figure 1 shows sleep talking during

REM sleep. In Figure 2 the patient is observed waking up from REM sleep acting out a dream.

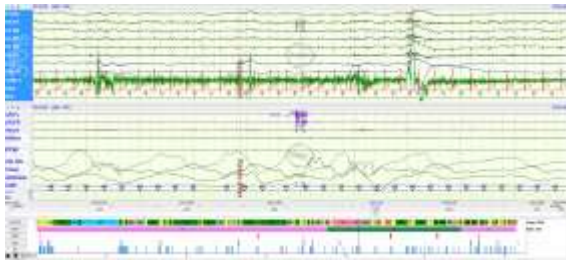


Figure 1. This image shows increased chin tone in stage REM sleep. Sleep talking was observed and recorded by the sleep technologist. To view Figure 1 in a separate enlarged window click [here](#).

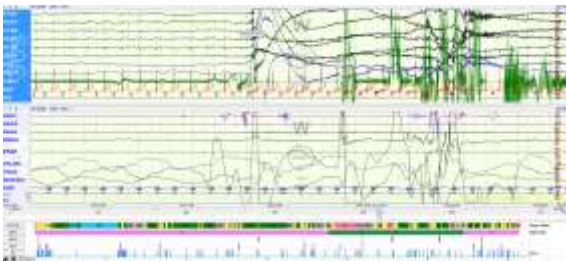


Figure 2. This image shows transition from stage REM to Wake while acting out a dream. The movement observed and recorded by sleep technologist denotes the patient sleep talking and handing something to someone with transition to wake. To view Figure 2 in a separate enlarged window click [here](#).

What is the ***most likely diagnosis*** based on the history and overnight polysomnography?

1. Narcolepsy
2. Periodic limb movement disorder
3. Rapid Eye Movement Behavior Disorder (RBD) or dream enactment behavior
4. Refractory sleep apnea
5. Seizure disorder

Correct!

3. Rapid Eye Movement Behavior Disorder (RBD) or dream enactment behavior

The patient's episodes of waking from dreams with screaming or throwing punches are suggestive of Rapid Eye Movement Behavior Disorder (RBD) or dream enactment behavior. RBD is a parasomnia characterized by the loss of muscle atonia during REM sleep, allowing individuals to act out their dreams. The patient demonstrated this behavior despite adequate control of sleep apnea on CPAP.

Which class of ***medications can unmask dream enactment behavior?***

1. Dopamine Agonist
2. Norepinephrine Dopamine Reuptake Inhibitors
3. Selective Serotonin Reuptake Inhibitors
4. Serotonin Norepinephrine Reuptake Inhibitors
5. Both 3 and 4

Correct!

5. Both 3 and 4

Any drug that increases serotonin can unmask Rapid Eye Movement Behavior Disorder (RBD). Offending agents including SSRIs should be discontinued or at least benefits versus risks of continuation should be weighed with a mental health professional. In addition, management of RBD includes initiating safety measures to prevent falls, self-harm, and harm to the patient's bed partner. Which of the following medications is ***not part of the conditional recommendations*** for AASM 2023 management of REM Behavior disorder?

1. Melatonin
2. Gabapentin
3. Benzodiazepines
4. Dopamine Agonist
5. Safety Precautions

Correct!

2. Gabapentin

Melatonin, Clonazepam, and Pramipexole are all conditional recommendations for management of isolated RBD. If the patient

continues to demonstrate dream enactment behavior it would be reasonable to try melatonin, or a benzodiazepine to reduce symptoms. For intractable and persistent symptoms, a Dopamine agonist would be warranted as the most appropriate next step. This case highlights the complex management of a 31-year-old male with a history of seizure disorder, SVT, severe OSA, and excessive daytime sleepiness. The patient's response to CPAP therapy, along with the presence of dream enactment behavior, raises suspicion of Rapid Eye Movement Behavior Disorder (RBD). Discontinuation of SSRIs with regular follow-up and monitoring will ensure ongoing management and adjustment of the treatment plan as necessary.

References

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2. Howell M, Avidan AY, Foldvary-Schaefer N, Malkani RG, During EH, Roland JP, McCarter SJ, Zak RS, Carandang G, Kazmi U, Ramar K. Management of REM sleep behavior disorder: an American Academy of Sleep Medicine clinical practice guideline. *J Clin Sleep Med.* 2023 Apr 1;19(4):759-768. [[CrossRef](#)] [[PubMed](#)]