CLINICAL VIGNETTE

REM Sleep Behavior Disorder Associated with Antidepressant Use

Alfonso J. Padilla, MD and Sam A. Kashani, MD

Division of Pulmonary, Critical Care and Sleep Medicine, David Geffen School of Medicine at UCLA Health Sciences

Case Presentation

An 18-year-old female with depression and anxiety, presented to sleep medicine for concern for dream enactment behavior. Over the last few months the patient had loud vocalizations during sleep. These vocalizations consist of loud arguing, grunting, screaming (usually obscenities) during sleep associated with occasional thrashing about in bed. She punched the wall during one of the episodes although she denied significant injury related to events. The patient can recall some of the screaming events but lacks control over the events. Her mother reports she seems to be able to communicate at least partially with her during the events although her vocalizations often do not make sense. These events seemed to develop when she was under treatment with venlafaxine for anxiety and depression. She stopped taking venlafaxine two weeks prior to visit but noted no improvement in symptoms. Fluoxetine was initiated upon discontinuation of venlafaxine. She also noted worsening insomnia as she became concerned about going to sleep. Her events seemed worse in the early morning hours.

Evaluation in clinic was unremarkable. An overnight polysomnogram with expanded electromyogram (EMG) montage was ordered to assess for Rapid eye movement sleep behavior disorder (RBD) or other complex parasomnias. Safety measures were discussed with patient and family.

Overnight polysomnogram showed abnormality of REM sleep. EMG was abnormal during a majority of REM epochs with frequent movements of limbs and increased chin tone meeting criteria for REM sleep without atonia. She was noted to have loud vocalizations, screaming of obscenities and apparent arguing during REM sleep. She also flailed her arms and punched her pillows during REM sleep.

She was diagnosed with REM sleep behavior disorder (RBD). The patient was started on melatonin, which has been reported to help RBD.[1] She developed nightmares and worsening of symptoms and discontinued melatonin. She refused treatment with clonazepam but decided to discuss discontinuation of antidepressants with her psychiatrist. A recommendation was made to consider bupropion or complete discontinuation of antidepressants.

Patient discontinued fluoxetine and was transitioned to escitalopram by psychiatry. Her symptoms continued unchanged.

Eventually the patient was weaned completely off selective serotonin reuptake inhibitors (SSRI) and selective serotonin and norepinephrine reuptake inhibitors (SNRI) and her symptoms improved over a few weeks. She was transitioned to bupropion with good control of her nighttime symptoms. Eventually she started trazodone at night for help with insomnia without recurrence of symptoms.

Discussion

RBD is a parasomnia associated with vivid, often violent, dreams and dream enactment behaviors.[1] The disease is associated with increased muscle tone or movements during REM sleep and loss of the typical atonia that occurs during REM sleep. Patients with RBD can sometimes be injured during the violent dream enactment behaviors. The diagnosis of RBD is made when a patient has dream enactment behavior by history and an overnight polysomnogram consistent with REM sleep without the expected REM sleep atonia. RBD can be related to neurodegeneration as with alpha-synucleinopathies such as Parkinson's disease or can be idiopathic without known associations.[1] Patients are often diagnosed with idiopathic RBD when a reason for the RBD is not found. Neurodegeneration is common, especially in older patients. When RBD is diagnosed in older patients, a candid discussion is necessary given the high risk of development of alpha-synucleinopathies. There is also an association with the use of antidepressant medications, especially SSRIs and SNRIs, and development of RBD.[1-5] Younger patients are seen in medication related cases of RBD.[1,3,5]

Our patient developed symptoms consistent with RBD after initiation of venlafaxine, an SNRI associated with RBD. Her symptoms continued despite two changes in medication to fluoxetine and escitalopram. These are both SSRIs and also associated with RBD.[3,4] Symptoms finally improved with the discontinuation of these antidepressants and a switch to bupropion which has not been associated with RBD.

Treatment of RBD is initially directed to instituting safety measures to prevent injuries from dream enactment behaviors. Removal of sharp objects, glass, and weapons close to the bed environment are necessary. Patients should be cognizant of the environment for safety hazards, taking into account large

windows, balconies and the risk of high floors in buildings. Medical treatment of RBD initially is with melatonin in doses from 5-15mg. Some, as our patient, report vivid dreams and nightmares with melatonin. Clonazepam has been shown to be effective therapy for control of RBD presumably by stabilizing movements and phasic REM activity.[1]

Our patient attempted to change her medication multiple times, working with her treating psychiatrist. She continued to have symptoms, as the changes involved similar classes of medications that had been associated with RBD. Her symptoms eventually improved when she transitioned off commonly offending medications.

Given that SSRIs, SNRIs and TCAs have all been associated with medication related RBD, clinicians prescribing these medications should be aware of this possible side effect and transition off antidepressants or switch to bupropion if patients develop dream enactment behaviors.

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