Bupropion-Induced Nightmares Treated With Clonidine

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Nightmares, disturbing dreams that can distress and wake people from sleep, commonly occur during rapid eye movement (REM) sleep. Nightmares may be triggered by many factors including stress, anxiety, trauma, sleep deprivation, medications, and substance use. Bupropion, an antidepressant, is a norepinephrine dopamine reuptake inhibitor that potentially impacts sleep architecture by increasing REM sleep and density.[1] We describe, to our knowledge, the first case in which clonidine, an α-2 adrenergic agonist, was used to treat bupropion-induced nightmares.

Case Report

A 15-year-old girl with a history of anxiety and depression was prescribed escitalopram and lamotrigine to treat symptoms of depression. She had a history of major depressive disorder for the past 4 years. The medications were ineffective in treating her symptoms, and she was tapered off escitalopram. Different medications were discussed with the patient, and, eventually, she was prescribed bupropion sustained-release 100-mg tablets due to her preference. Within a few days of initiating bupropion, her depressive symptoms started improving; however, she also reported experiencing recurring nightmares and vivid dreams. The nightmares were violent in nature and felt unusually real to the patient. She continued to respond favorably to treatment with bupropion, and her depressive symptoms improved substantially. Although bupropion improved her depressive symptoms more than other medications, she was sufficiently distressed by the dreams to inquire about stopping the medication. In an attempt to reduce her recurring nightmares, the patient was prescribed clonidine 0.1 mg to take at night. Within 3 days of starting clonidine, she reported a reduction in nightmares. After 10 days of taking clonidine, the nightmares had completely ceased. The clonidine was reduced to every alternate day for a month and discontinued completely after that. The patient continues to experience nightmare-free sleep.

It is well established that nightmares commonly occur during REM sleep. Previous literature[1] has indicated that antidepressants such as bupropion increase the length of REM sleep. Additionally, it has been reported that treatment with bupropion significantly lengthens REM latency and increases REM activity and density.[2] Clonidine is a α-2 adrenergic agonist commonly used for the treatment of attention-deficit/hyperactivity disorder and hypertension. It acts by reducing the sympathetic outflow from the central nervous system. This central mechanism of action may be why clonidine has been shown to completely suppress or reduce REM sleep.[3] Use of clonidine as an agent to reduce REM sleep could possibly counter bupropion's effect of increasing REM sleep and help to alleviate nightmares.

This case report describes the possibility of nightmares as a side effect of bupropion, which can effectively be treated with clonidine. Clinicians should be aware of this side effect, as it can potentially impact adherence to antidepressants, and its treatment.

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