

Panic Attacks During Escalation of Mirtazapine

Sir: Mirtazapine is a unique antidepressant that involves both serotonergic and noradrenergic enhancement through blockade of the α_2 -autoreceptor and α_2 -heteroreceptor.¹ It is also a 5-HT₂ blocker, which makes it a potential anxiolytic agent.² Overall, mirtazapine appears to be a useful agent in patients with depression coexisting with anxiety symptoms.³ The following case describes a patient diagnosed with dysthymia who experienced panic attacks upon increasing her dose of mirtazapine, an effect not previously described.

Case report. Ms. A was a 23-year-old married woman diagnosed with dysthymia (DSM-IV). Prior to her presentation she had taken no psychotropic agents. She described an unremarkable medical history and was taking no prescribed medications; did not abuse alcohol; denied the use of any illicit substances, tobacco products, or herbal medications; and drank 1 to 2 cups of coffee per day. Ms. A denied any significant psychosocial stressors or significant family psychiatric history. A review of recent laboratory results included a negative pregnancy test and a complete blood count, serum chemistries, and thyroid-stimulating hormone all within normal limits. Ms. A agreed to a trial of mirtazapine initiated at 15 mg/day for 2 weeks and tolerated the dosage without event.

At her follow-up appointment, the mirtazapine dose was increased to 30 mg/day to target her residual depressive symptoms. Within 2 days of the dose increase, Ms. A experienced a panic attack consisting of palpitations, shortness of breath, sweating, nausea, hot flushes, and thoughts of losing her mind. Her husband took her to an emergency room where she was evaluated, prescribed alprazolam 0.5 mg to be taken on an as needed basis, and released. Ms. A had several panic attacks over the next week, and these too were alleviated by taking alprazolam. It was decided to decrease the mirtazapine back to 15 mg/day to see if the increased dose might be responsible for the panic attacks; the panic attacks subsequently stopped. After 1 week, the mirtazapine was increased to 30 mg/day to treat the residual depressive symptoms. Unfortunately, the patient experienced panic attacks 1 day within the dose escalation. A decision was made

to change agents, and venlafaxine extended release (XR) was initiated at 37.5 mg/day after a 4-day wash-out period. The venlafaxine XR was increased to 75 mg/day at 2 weeks and titrated to 150 mg/day after 1 month with no panic attacks.

Mirtazapine has been looked at in the treatment of panic disorder in a double-blind study of 27 patients treated with either mirtazapine or fluoxetine.⁴ Mirtazapine has shown favorable results in 4 open-label studies and a case series.⁵⁻⁹ However, there is a case report of a panic attack that occurred during the discontinuation of mirtazapine.¹⁰ The panic attacks were unexpected but could have occurred due to increasing serotonergic transmission that produced a short-lived anxiety similar to that sometimes seen when using serotonin reuptake inhibitors.¹⁰ The presented case underscores the need for clinicians to be vigilant for side effects when prescribing antidepressant agents.

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