

## Atypical Migraine Manifesting as Mania

*To the Editor:* This is a case report of a previously diagnosed "treatment-refractory bipolar" patient whose successful treatment of atypical migraine resulted in the questioning of any psychiatric diagnosis.

A 47-year-old man was referred to the Mood Disorders Clinic for severe migraine associated with mood, "psychic," and neurologic symptoms. He had first presented to Psychiatry 8 years earlier, for acute "mania" with agitation, extreme lability, intense anger, and religiosity necessitating hospitalization. Subsequently, he had recurrences of similar manic "crises" followed by a "depressive" states consisting of cognitive dysfunction, avolition, and anhedonia. He also experienced severe headache and nonspecific neurological symptoms. A diagnosis of migraine was suspected, and a thorough neurological work-up did not yield other diagnoses. Medical history revealed multiple recurrent migraine-equivalents since childhood (particularly, abdominal pain).

Each psychiatric "crisis" was preceded by weeks of increasingly frequent, severe, early morning migraine attacks, with subsequent sleep deprivation, and intensification of migraine symptoms, including aura, with disorganized speech and thinking and bizarre behavior. A prolonged period of complete rest would break the cycle of migraine, accompanied by complete resolution of psychiatric symptoms.

Previous treatments included lithium, bupropion, as well as nortriptyline, stemetil, valproic acid, and quetiapine, none of which were helpful. Family history was positive for migraine and negative for psychiatric disorders. On referral, his medications were propranolol 40 mg twice daily, valproic acid 500 mg twice daily, and lamotrigine 100 mg twice daily. Valproic acid level was therapeutic. A diagnosis of mood disorder, bipolar type secondary to severe migraine was made.

### Discussion

This case illustrates the importance of inquiry of neurological symptoms, in particular headache, in patients with bipolar disorder. Patients with bipolar disorder have a greater-than-twofold risk of having migraine, as compared with the general population.<sup>1</sup> Treatment for migraine, irrespective of mood disorder, includes amitriptyline, valproate, topiramate, and beta-blockers.<sup>2</sup> In patients with bipolar disorder and migraine, judicious use of treatments for both disorders should be considered. Lamotrigine was used for this patient because valproate, although approved for both disorders,<sup>3</sup> did not ameliorate the migraine symptoms. For *bipolar* disorder, lamotrigine is efficacious in the prevention of depressive episodes and, possibly, rapid-cycling type.<sup>4</sup> Less evidence supports its use in acute depression or mania.<sup>4</sup> For *migraine*, lamotrigine was not beneficial in a placebo-controlled trial, but had some effectiveness in two open pilot studies for the treatment and prevention of migraine aura.<sup>2</sup>

Lamotrigine is generally well tol-

erated, with an acceptable side-effects profile (mainly dizziness, nausea, and insomnia), and may be considered for a patient with aura nonresponsive to other medication. Slow and low dose increase is recommended for side-effects monitoring, especially for severe rashes and Steven's Johnson syndrome. In our patient, lamotrigine was increased to 200 mg twice daily. Use of lamotrigine with valproate may increase lamotrigine concentrations by up to 200% because of increased lamotrigine clearance inhibition,<sup>3,5</sup> and valproate levels may also decrease.<sup>3</sup> The patient's headache duration eventually decreased to 1 hour nightly, and he returned to work full-time with a 45-minute nap.

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