t is illegal to post this copyrighted PDF on any website Mania Induced by Garcinia cambogia: A Case Series third did not. Given the multifactorial mechanisms of mania, it

To the Editor: Despite that the putative mechanism of action of the weight loss supplement *Garcinia cambogia* is considered to be serotonergic, literature about its psychiatric effects is limited.^{1,2} We report 3 stable, euthymic adults whose mania emerged when they began taking *G.cambogia*.

Case 1. Mr A, a 50-year-old man with bipolar I disorder, had been stable off medications for 6 years before presenting to the emergency department with mania. Two months prior, Mr A had begun dieting and taking 2 pills of *G. cambogia* daily. One month later, he developed grandiosity, irritability, pressured speech, excessive spending, increased social activity, and decreased need for sleep. He was admitted to the psychiatric unit and diagnosed with bipolar I disorder, manic, severe (*DSM-5*). After a 16-day hospitalization, he was discharged on olanzapine and valproic acid treatment and counseled to avoid *G. cambogia*.

Case 2. Mr B, a 25-year-old man without a psychiatric history, presented to the emergency department with mania. He had begun dieting, exercising, and consuming *G. cambogia* 1–2 pills daily for 2 months prior to presentation. Within weeks of starting this regimen, he developed inflated self-esteem, grandiosity, decreased need for sleep, increased activities, excessive spending, and pressured speech. Later symptoms included paranoia and religious delusions. He was admitted to the psychiatric unit with bipolar I disorder, manic, severe, with psychosis (*DSM-5*). He was discharged 8 days later on olanzapine and valproic acid treatment and counseled about cessation of *G. cambogia*.

Case 3. Ms C, a 34-year-old woman with bipolar II disorder and past selective serotonin reuptake inhibitor (SSRI)–induced hypomania, had begun dieting, exercising, and taking *G. cambogia* for 4–6 weeks prior to onset of symptoms, which included irritability, pressured speech, decreased need for sleep, and agitation. She saw her psychiatrist 1 month after symptom onset and was diagnosed with a recurrence of bipolar II disorder, hypomanic, moderate (*DSM-5*). Her symptoms remitted with low-dose lorazepam, cessation of *G. cambogia*, and continuation of preexisting medications (aripiprazole, bupropion, topiramate).

This case series describes 3 stable patients whose manias emerged during use of *Garcinia cambogia*, an over-the-counter weight loss supplement. The putative mediator of *G. cambogia*'s weight loss effect is hydroxycitric acid (HCA), a substance with demonstrated serotonergic activity in animals and humans.^{2,3} HCA is thought to promote release and synaptic availability of serotonin, influencing appetite. There are 2 known case reports^{4,5} that suggest HCA-containing weight loss supplements may contain psychoactive serotonergic properties. One involved mania that emerged on Hydroxycut (Iovate Health Sciences International, Inc), an HCA-containing supplement.⁴ The other involved a patient who developed serotonin syndrome when an SSRI was combined with *G. cambogia*.⁵

Antidepressants have been theorized to promote a switch to mania through action on neurotransmitters.⁶ Other medical conditions and substances have also been implicated in generating symptoms and in altering the course of bipolar disorder.^{7–14} Our case series suggests that *G. cambogia* may induce mania or hypomania in predisposed euthymic individuals. Our patients were euthymic, and manic symptoms developed after *G. cambogia* was started. Two patients had previously diagnosed bipolar illness; the is impossible to establish *G. cambogia* as causative. Furthermore, supplements have inherent variability in dosages and ingredients. However, identifying *G. cambogia* as a risk is important. For the 2 patients with known bipolar disorder, it seems that *G. cambogia* altered the course of their disorder by precipitating episodes during stable phases. In Mr B's case, *G. cambogia* either unmasked primary bipolar illness or created a substance-induced disorder. In all 3 cases, recovery included cessation of *G. cambogia* and usual clinical treatment.

We remind clinicians of the importance of inventorying all medications, vitamins, and supplements during a patient's psychiatric evaluation and suggest further research is needed to clarify the psychiatric effects or side effects of *Garcinia cambogia*.

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