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## LETTERS TO THE EDITOR

# Recurrent Hypersomnia and Autonomic Dysregulation in Posttraumatic Stress Disorder

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Mahmoudi and colleagues<sup>1</sup> have highlighted the very important and often overlooked role of autonomic dysregulation in recurrent hypersomnia. They describe the case of a 50-year-old man with atypical bipolar disorder and autonomic instability due to catatonia, who presented with periods of extreme sleepiness lasting 2 to 3 days, and recurring every 3 to 5 days, in conjunction with symptoms of sympathetic activation. A sleep study revealed severe obstructive sleep apnea and a Multiple Sleep Latency Test (MSLT) was not performed. Treatment with continuous positive airway pressure and modafinil 250 mg daily improved the sleep fragmentation but not the hypersomnolence. However, 1 g of valproic acid for the treatment of bipolar disorder also resulted in remission of the hypersomnia. The authors discuss that the autonomic instability in catatonia could have been the basis for the hypersomnolence.

I have observed a similar pattern of hypersomnolence in 5 patients with posttraumatic stress disorder (PTSD)<sup>2</sup> (all female, ages 26 to 55 years), in the absence of catatonia. A high sympathetic tone and problems with autonomic regulation are core features of PTSD.<sup>3</sup> In all patients the onset of hypersomnolence was preceded by a significant traumatic event and physical signs of sympathetic activation (eg, palpitations, hyperhidrosis, tremors) and typically lasted for 6 to 8 weeks after which the patient resumed a normal sleep pattern.<sup>2</sup> The hypersomnia episodes occurred once or twice per year. The hypersomnia did not meet criteria for Kleine-Levin syndrome or all criteria for hypersomnia associated with a psychiatric disorder.<sup>4</sup> Patients described nonrestorative nighttime sleep lasting 12 to 16 hours, in conjunction with daytime naps lasting 2 to 3 hours.<sup>2</sup> During the periods of hypersomnolence the Epworth Sleepiness Scale score ranged from 16 to 20.<sup>2</sup> Three patients underwent polysomnography and MSLT and results were inconclusive.<sup>2</sup> Modafinil 200 mg was associated with significant activation manifesting as insomnia of  $\geq 24$  hours duration, which was followed by recurrence of hypersomnolence.<sup>2</sup> Mood stabilizers such as valproic acid, 500–750 mg and lamotrigine, 50–100 mg (originally prescribed to manage the emotional dysregulation in PTSD) were associated with a significant resolution of the hypersomnolence within 1 to 2 weeks (Epworth Sleepiness Scale score = 0–2),

and prevented the recurrence of hypersomnia in reaction to traumatic stressors.

Hypersomnolence may represent a compensatory response to acute sympathetic activation in disorders associated with autonomic dysregulation. This may explain the favorable response of the hypersomnolence to anti-convulsant mood stabilizers and not modafinil.<sup>1,2</sup>

## CITATION

Gupta MA. Recurrent hypersomnia and autonomic dysregulation in posttraumatic stress disorder. *J Clin Sleep Med*. 2017;13(12):1491.

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## DISCLOSURE STATEMENT

The author reports no conflicts of interest.