

## LETTERS TO THE EDITOR

# Challenges in the Management of Sleep Apnea and PTSD: Is the Low Arousal Threshold an Unrealized Target?

Response to Gupta. Treatment of PTSD-related OSA with CPAP is associated with only a modest improvement in PTSD: possible adjunctive treatment with mood stabilizers. *J Clin Sleep Med.* 2017;13(6):841.

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We greatly appreciate Dr. Gupta's comments regarding the complexities of managing comorbid obstructive sleep apnea (OSA) in patients with posttraumatic stress disorder (PTSD) and the bidirectional relationship between these two conditions.<sup>1</sup> Dr. Gupta's experiences parallel those described by the journal's recent article by Orr et al.<sup>2</sup> and our prior studies on this topic.<sup>3,4</sup>

Dr. Gupta raises an important question regarding the potential benefits of adjunctive pharmacotherapy for comorbid OSA and PTSD.<sup>1,5</sup> Although this practice has not been systematically assessed, there appears to be value in utilizing sedative hypnotic medication to assist in the management of OSA for some patients, particularly those with PTSD. Similar to Dr. Gupta, we have also found this beneficial in our clinical practice. Insomnia and sleep fragmentation are common in those with PTSD. This further compromises sleep quality and negatively affects positive airway pressure use, which diminishes the therapeutic response and further impairs outcomes. We have previously assessed cohorts of patients with PTSD and OSA and demonstrated poor positive airway pressure adherence and a truncated benefit of therapy.<sup>3,4</sup>

As noted in the article by Orr and colleagues,<sup>2</sup> this is a challenging population. Although treatment with continuous positive airway pressure improves symptoms of PTSD based on an objective measure (PTSD Checklist-Specific), these improvements are modest. Given the high stakes in this population, it is important to consider all options available.

Dr. Gupta suggests mood stabilizers to improve sleep and potentially decrease the apnea-hypopnea index. This strategy could be applicable to OSA patients with the low arousal threshold phenotype. These patients often have mild to moderate OSA, predominantly obstructive hypopneas, and minimal oxygen desaturations,<sup>6</sup> which is consistent with the profile of patients with PTSD we see in our practice. Although some studies have demonstrated that sedatives can raise the arousal threshold and potentially decrease the apnea-hypopnea index, there is no evidence that doing so improves clinical outcomes among those with PTSD. As Dr. Gupta alludes to, most of the data are anecdotal and difficult to quantify.

Although adjunctive pharmacotherapy may be beneficial, the use of additional psychoactive medications should be approached with some caution in this population, many of whom are already using multiple psychoactive agents. Medications commonly used in this population have the potential to alter sleep architecture, potentially worsen sleep disturbances, and adversely affect daytime function. An improved understanding of how commonly used psychoactive medications in this population affect sleep quality and sleep-disordered breathing would provide another avenue to improve care in this high-risk population.

## CITATION

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## DISCLOSURE STATEMENT

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