DEPARTMENTS

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## Association between OSA and Severe Fatigue in Patients with Multiple Sclerosis (MS)

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Te were pleased to read the study of Braley et al.,<sup>1</sup> which provides additional support for the finding previously reported by ourselves<sup>2</sup> and others<sup>3</sup> of an association between OSA and severe fatigue in multiple sclerosis (MS) patients. A strength of the latter two studies was that OSA was ascertained objectively in all subjects by polysomnography (PSG), while Braley et al. relied on questionnaire (STOP-Bang)based diagnosis. STOP-Bang has not been specifically validated in MS, so its reliability in this context is unknown. We found that the Berlin questionnaire, another OSA screening tool validated in the general population, had poor sensitivity for PSG-identified OSA in MS patients (46%, 95% confidence interval 34% to 58%).<sup>4</sup> Thus both the prevalence of OSA, and its impact on fatigue may have been underestimated by Braley et al. However, similar to our study, their findings suggest that OSA is under-recognized and under-diagnosed in MS.

With respect to the potential effects of OSA treatment on fatigue in MS patients, Braley et al. reported no difference in fatigue scores for OSA patients with self-reported CPAP compliance versus other subjects. However this finding was limited by small subject numbers, lack of objective CPAP compliance data, and absence of a longitudinal assessment of the effect of OSA treatment on fatigue scores. We recently reported a systematic follow-up of 56 MS subjects at > 3 months and found that successful treatment of sleep disorders (the most prevalent of which was OSA) was associated with a significant improvement in fatigue scores.<sup>5</sup> Specifically in multivariate analyses, treatment of OSA was associated with an adjusted improvement in the Fatigue Severity Scale of  $-0.96 \pm 0.30$ , p =  $0.002.^{5}$  While this was a non-randomized, observational study, the findings strongly suggest that treatment of OSA in MS patients may improve fatigue. On the basis of these findings, together with those of Braley et al. and

others, we believe that randomized, controlled trials are warranted to more carefully evaluate the effect of OSA treatment on fatigue in MS patients.

#### CITATION

Kaminska M, Trojan DA, Kimoff RJ. Association between OSA and severe fatigue in patients with multiple sclerosis (MS). *J Clin Sleep Med* 2014;10(6):707.

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### SUBMISSION & CORRESPONDENCE INFORMATION

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