

# The Clinical Dilemma: To Treat or Not to Treat REM Related Obstructive Sleep Apnea?

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I read with great interest the commentary by Mokhlesi and Punjabi, “REM-related obstructive sleep apnea (OSA): An epiphenomenon or a clinically important entity?”<sup>1</sup> The article was eloquently written, and it brings up some important points.

REM sleep period comprises about 20% to 25% of normal human sleep architecture.<sup>2</sup> REM sleep mostly occurs in the last half of the night. In most of our diagnostic polysomnogram or split night studies, REM sleep is underachieved because of scheduling conflicts and hence the REM AHI (apnea hypopnea index) is underestimated. Also REM related OSA is sometimes associated with significant desaturation for prolonged periods, in spite of a normal or mildly elevated NREM AHI. Many of these patients also have other comorbidities such as diabetes, hypertension, strokes, or coronary disease. So are we putting these patients at risk if we do not recommend PAP (positive airway pressure) therapy?

The studies addressing this issue may not be conclusive but some of these studies have shown association of the REM related OSA and comorbidities. One of the studies<sup>3</sup> shows high prevalence of type 2 diabetes in this subgroup of patients. As alluded to in this commentary, many of these studies were not looking specifically into this issue, and the outcome results in some of these studies may have been flawed by study designs. However, worsening of sleep disordered breathing during REM sleep is well documented, leading to a guideline from an AASM task force<sup>4</sup> that recommends that in any PAP titration study for sleep disordered breathing, optimization of PAP therapy should

include a REM sleep period for at least 15 min. So, at the present moment till the dust settles, as a clinician facing this dilemma the treatment with PAP therapy in patients with REM Related OSA is guided by the symptoms of daytime sleepiness and not by other comorbidities.

A randomized, controlled, prospective study specifically addressing the cause and effect of REM related OSA on the different comorbidities may be needed before we can justify using PAP therapy in all patients with REM related OSA, irrespective of their normal or mild AHI.

## CITATION

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## DISCLOSURE STATEMENT

This was not an industry supported study. Dr Ganguly is a partner of Neurology Consultants Medical Group.

## REFERENCES

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