

LETTERS TO THE EDITOR

Yogic *Pranayama* and PAP Therapy: Is There a Connection?

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Positive airway pressure (PAP) therapy is an effective treatment for sleep apnea, because among many things, it improves a patient's quality of life.¹ However, there is currently limited evidence of the benefits of PAP therapy in individuals without sleep apnea, some of whom have reported the beneficial effects of breathing exercises, especially yoga.²

Similar to yoga, PAP therapy enhances breathing regulation, improves metabolism, and reduces cardiovascular morbidity.³ Therefore, the authors are recommending randomized controlled trials in order to establish an operational comparability between PAP therapy and a yogic practice, *Pranayama*.¹

From the compound word *Pranayama*, *Prana* means "vital energy," whereas *Ayama* means "to extend."⁴ Thus, *Pranayama* improves breathing, and enhances the distribution of energy within the body.

Breathing practices in *Pranayama* include:

- *Pūraka* (inhalation);
- *Recaka* (exhalation);
- *Antah kumbhaka* (internal retention of breath); and
- *Bahih kumbhaka* (external retention of breath).⁴

The practice of *Pranayama* improves breathing by increasing lung capacity, enhancing respiratory muscle function, and ensuring patency of the upper airway.⁴ It is important to note, however, that the pressure gradient of bilevel PAP therapy can achieve the aforementioned respiratory patterns, while requiring less human effort than seen with yogic activities.⁵

Concerns about the use of PAP in healthy patients arise from side effects,⁶ including central apnea,⁷ which, in turn, still requires PAP therapy.

Because PAP has been recommended for use in patients with other types of sleep disorders, including those who did not meet the diagnostic criteria for sleep apnea,⁸ randomized controlled trials may demonstrate PAP's therapeutic benefits among the increasing number of individuals with such sleep disorders,^{8,9} who might embrace a more efficient means of improving sleep and breathing.

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DISCLOSURE STATEMENT

The authors report no conflicts of interest.