JCSM Journal of Clinical Sleep Medicine

## LETTERS TO THE EDITOR

# Reply to "Impact of obstructive sleep apnea on left ventricular mass index in men with coronary artery disease"

Ali Azarbarzin, PhD; David P. White, MD

Division of Sleep and Circadian Disorders, Brigham and Women's Hospital and Harvard Medical School, Boston, Massachusetts

We thank Dr. Huang and colleagues<sup>1</sup> for their attempt to use "hypoxic burden"<sup>2,3</sup> to assess the impact of obstructive sleep apnea on the left ventricular mass index in men with coronary artery disease. We caution the readers, however, that the hypoxic burden developed by Huang et al in this paper<sup>1</sup> is substantially different from the original hypoxic burden developed by our lab<sup>2,3</sup> and referenced by Huang.<sup>1</sup> For example, for a similar sleep apnea severity in the Sleep Heart Health Study (SHHS) [n = 5,792; apnea-hypopnea index = 13.1 (6.7-23.8) compared to 12.7 (6.1–26.2) events/h in Huang et al<sup>1</sup>], the values for hypoxic burden are vastly different [SHHS: 35.3 (18.7-61.2) vs 7.9 (2.4-24.7) % min/h in Huang et al.<sup>1</sup>]. This suggests a very different methodology for the determination of hypoxic burden by Huang et al than was used in our previous studies. Thus, the hypoxic burden-related findings in Huang et al<sup>1</sup> should be interpreted with caution until their methods for calculating this metric are fully understood.

## CITATION

Azarbarzin A, White DP. Reply to "Impact of obstructive sleep apnea on left ventricular mass index in men with coronary artery disease." *J Clin Sleep Med.* 2021;17(2):357.

## REFERENCES

- Huang Z, Wang L, Liu Y, et al. Impact of obstructive sleep apnea on left ventricular mass index in men with coronary artery disease. J Clin Sleep Med. 2020;16(10): 1675–1682.
- Azarbarzin A, Sands SA, Taranto-Montemurro L, et al. The sleep apnea-specific hypoxic burden predicts incident heart failure. *Chest.* 2020;158(2):739–750.
- Azarbarzin A, Sands SA, Stone KL, et al. The hypoxic burden of sleep apnoea predicts cardiovascular disease-related mortality: the Osteoporotic Fractures in Men Study and the Sleep Heart Health Study. *Eur Heart J.* 2019; 40(14):1149–1157.

### SUBMISSION & CORRESPONDENCE INFORMATION

Submitted for publication October 22, 2020 Submitted in final revised form October 27, 2020 Accepted for publication October 27, 2020

Address correspondence to: Ali Azarbarzin, PhD, Harvard University, 221 Longwood Ave, Boston, MA 02115; Tel: (617) 732-5619; Email: aazarbarzin@bwh.harvard.edu

## **DISCLOSURE STATEMENT**

All authors have seen and approved the manuscript. Work was performed at Brigham and Women's Hospital and Harvard Medical School. The authors report no conflicts of interest.