

# Central Sleep Apnea Syndrome Prevalence is High after an Acute Coronary Syndrome without Heart Failure or Left Ventricular Dysfunction



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## Introduction and Objectives

Although the prevalence of obstructive sleep apnea (OSA) syndrome is high in patients with acute coronary syndrome (ACS), little is known about central sleep apnea (CSA) prevalence in these patients, especially if they have no left ventricular dysfunction. Furthermore, central apnea could be promoted by ticagrelor, a relatively new drug.

## Methods

All consecutive patients within 100 days after an ACS were included if they had left ventricular ejection fraction LVEF > 45%, no history of heart failure, systolic arterial pulmonary artery inferior to 45 mm Hg, no known history of sleep apnea, and if they were not receiving a sedative drug. After inclusion, patients underwent an overnight sleep study with a Nox T3 portable sleep monitor.

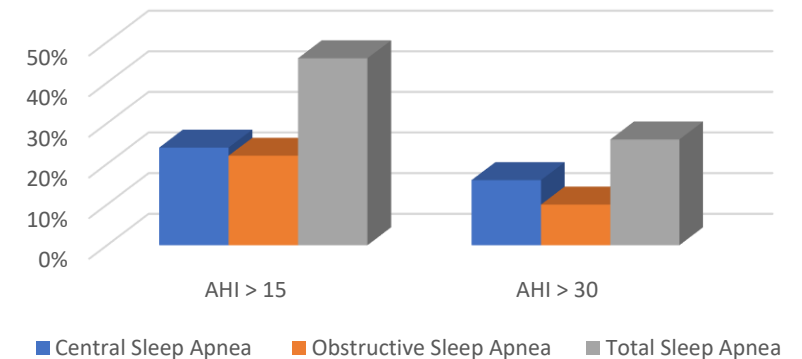
## Results (1)

Between May 1, 2018 and April 10, 2019, we included 50 consecutive patients (age  $56.1 \pm 10.5$ , male 54%, mean body mass index  $28.6 \pm 4.9$ ),  $43 \pm 24$  days after an ACS. All of them were receiving a dual antiplatelet therapy: aspirin 100%, ticagrelor (85%), clopidogrel 10%, prasugrel 5%.

## Results (2)

23 patients (46%) had a clinically significant (moderate to severe) apnea hypopnea index (AHI) > 15/hour: CSA: 24%, OSA: 22%. Among them 13 (26%) had a severe (AHI >30) sleep breathing disorder: CSA 16% OSA: 10%. The only favoring factor to have an AHI > 30 was timing for the sleep diagnostic test:  $29 \pm 24$  days in patients with AHI > 30 versus  $49 \pm 22$  days in the other patients,  $p = 0.01$ ). The role of ticagrelor could not be assessed because nearly all of the patients received it.

Sleep breathing Disorder after ACS



## Conclusion

As expected, OSA is frequent in coronary artery disease patients (early after an ACS in this study). High prevalence of CSA was less expected. **Our results suggest that, before looking for another (neurological) cause, confirmation of CSA should be done at least 2 months after the ACS.**

In relation to this presentation, I declare that there are no conflicts of interest.