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Usefulness of home sleep apnea tests in heart failure patients

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To the Editor:
We thank Dr. Mukesh Kapoor for his comments concerning our study [1]. We are in agreement that home sleep apnea testing is cost-effective and time saving for the majority of heart failure patients. In our country, we have no problems with insurances but the waiting list for a polysomnography is rather unacceptable.

Our study has validated the *ApneaLink Plus* device for the detection of sleep apnea, which is the device that we use. If other portable devices are to be used, they should first undergo a validation process for the new device and for the population to be tested.

Other aspect approached was the fact that we did not aim to distinguish between central sleep apnea (CSA) and obstructive sleep apnea (OSA). In fact, as we know, CSA in heart failure patients is prevalent in worst NYHA classes, especially in those with reduced ejection fraction, and its presence relates to a worse prognosis. However, CSA does not have an effective treatment. SERVE-HF study has shown that treating these patients with servo-ventilation is harmful, with a rise in mortality rate [2]. Results of the Canadian Continuous Positive Airway Pressure (CPAP) for Patients with Central Sleep Apnea and Heart Failure trial were neutral in the whole population [3] and a *post hoc* analysis showed that CPAP had a beneficial effect in CSA patients who respond to CPAP therapy [4]. So, only OSA has a formal indication for treatment in heart failure patients [5]. Heart failure patients should be tested when stable. The majority of heart failure patients have both OSA and CSA. By starting CPAP therapy in patients with AHI > 15 events/hour in *ApneaLink Plus* report, OSA will be properly and timely treated while CPAP will not be a wrong option for CSA and it might even be beneficial according to the results of the post hoc study mentioned above [4]. Those patients who do not respond to CPAP therapy should subsequently undergo a polysomnography to further clarify the sleep apnea type. Using this flowchart, only a minority of patients will need to obtain a polysomnography.

In conclusion, by using validated portable devices to diagnose sleep apnea, we are saving money and time and we will be able to treat who is really treatable.

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