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# Sleep Medicine

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Letter to the Editor

## Phone medical appointments for sleep-disordered breathing in Covid-19 pandemic – were they useful?



To the Editor

The World Health Organization declared the COVID-19 outbreak as a pandemic and it has conditioned changes in healthcare worldwide. Sleep medicine services were recommended to reduce in-hospital services and provide medical care by remote contact [1–3]. Sleep-disordered breathing (SDB) patient's follow-up are potentially elective situations that could be managed using telemonitoring and virtual medical appointments [3]. Moreover, these diseases are highly prevalent [4] and telemedicine tools can potentially help improve access to healthcare, avoiding a great amount of hospital displacements. Phone medical appointments (PMA) in the Sleep Lab of a tertiary university hospital in Porto were performed between 13th march 2020 and 31st may 2020. The authors evaluated the usefulness of PMA in SDB patient's follow-up.

A total of 769 phone consultations were performed, 149 first medical appointments and 620 follow-up ones. In first PMA, 73.1% patients answered the call. In follow-up PMA, 89.7% answered the call, 86.8% were under PAP-therapy. Information of PAP devices were available in 354 cases and 79.1% of patients presented an adequate adherence ( $\geq 4$  h/day for  $\geq 70\%$  of nights), median leaks was 12 (3–27) L/min and 76% were well controlled concerning sleep respiratory events ( $AHI \leq 5$  events/h).

A new therapeutic approach was more often started in patients with nasal congestion ( $p < 0.001$ ), rhinorrhea ( $p < 0.001$ ) and nosebleeds ( $p = 0.03$ ). Changes in previous therapy were more frequent in patients with nasal congestion ( $p < 0.001$ ), rhinorrhea ( $p < 0.001$ ), mucosal dryness ( $p < 0.001$ ) and nosebleeds ( $p = 0.02$ ). PAP settings adjustments were performed in 51 patients.

These results showed that teleconsultation of SDB patients was possible and useful in most cases as it allowed the resolution of several PAP-related side effects and adjustments in therapeutic strategies. The authors highlight the importance and potential benefits of telemonitoring, which allows efficient patients follow-up without requiring their presence at hospital medical appointments. Additionally, it promotes access equity to healthcare facilities [5].

### Conflict of interest

The ICMJE Uniform Disclosure Form for Potential Conflicts of Interest associated with this article can be viewed by clicking on the following link: <https://doi.org/10.1016/j.sleep.2021.05.033>.

### References

- [1] British Thoracic Society. Advice for those seeing patients with obstructive sleep apnoea. Available from: [www.brit-thoracic.org.uk/about-us/covid-19-information-for-the-respiratory-community/](http://www.brit-thoracic.org.uk/about-us/covid-19-information-for-the-respiratory-community/). [Accessed 23 March 2020].
- [2] American Academy Sleep Medicine. COVID-19 mitigation strategies for sleep clinics and labs. <https://aasm.org/covid-19-resources/>. [Accessed 8 April 2020].
- [3] Grote L, McNicholas WT, Hedner J. Sleep apnoea management in europe during the COVID-19 pandemic: data from the European sleep apnoea database (ESADA). *Eur Respir J* 2020;55:2001323. <https://doi.org/10.1183/13993003.01323-2020>.
- [4] Heinzer R, Vat S, Marques-Vidal P, et al. Prevalence of sleep-disordered breathing in the general population: the HypnoLaus study. *Lancet Respir Med* 2015;3(4):310–8. [http://doi:10.1016/S2213-2600\(15\)00043-0](http://doi:10.1016/S2213-2600(15)00043-0).
- [5] Bruyneel M. Telemedicine in the diagnosis and treatment of sleep apnoea. *Eur Respir Rev* 2019;28:180093. <https://doi.org/10.1183/16000617.0093-2018>.

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