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One step forward in understanding sleep in hypersensitivity pneumonitis patients

Paulo Mateus Madureira Soares Mariano[1], Pedro Rodrigues Genta[1]

In the previous issue of the *Jornal Brasileiro de Pneumologia*, Martins et al.[1] compared the prevalence of obstructive sleep apnea (OSA), patterns of nocturnal desaturation, sleep distribution, and sleep efficiency between patients with chronic hypersensitivity pneumonitis (HP) and controls. The accuracy of questionnaires for OSA detection was also tested. The study included 40 patients diagnosed with chronic HP and 80 controls whose spirometry results were within normal parameters. The selection of chronic HP patients followed specific criteria established by Salisbury et al.,[2] with matching controls based on sex, age, and BMI. We commend the authors for their study, given the scarcity of data on OSA in chronic HP patients.

Previous studies have reported a high prevalence of OSA in patients with interstitial lung disease (ILD), ranging from 68% to 88%.[3-5] Small observational studies have shown a similar prevalence of OSA in patients with ILD.[6] The high prevalence of OSA among ILD patients can be explained by the also high prevalence of OSA in adults, especially in the elderly.[7] In addition, the potential decrease in lung volume caused by the ILD can increase upper airway collapsibility due to the reduction of the tracheal tug on the pharynx.[8] The association between ILD and OSA is potentially harmful: previous evidence has shown a negative impact on nocturnal desaturation and survival.[9]

The main finding in the study by Martins et al.[1] was that the prevalence of OSA in patients with chronic HP was similar to that in matched control subjects. Another relevant finding was the inaccuracy of screening questionnaires for OSA among individuals with chronic HP. Additionally, the study revealed that sleep quality was poorer in chronic HP patients than in controls. However, it is not possible to estimate whether impairment of sleep quality was due to the underlying lung disease or OSA. Future studies should compare chronic HP patients with controls, including patients with and without OSA to explore the potential contribution of each disorder on sleep quality impairment. The authors also showed a higher percentage of total sleep time with SpO_2 below 90% in the chronic HP group when compared with the control group, which may potentially increase morbidity.

The authors highlighted several limitations. The sample size was relatively small, and participants were recruited from a single center, a limitation that restricts the generalizability of the results and their representation in different clinical settings. The study also excluded patients in more advanced stages of chronic HP, which might have influenced the prevalence of OSA and the interpretation of test results. Another limitation was the lack of a detailed description of spirometric results in the control group. Despite these limitations, the findings of the study by Martins et al.[1] are important because they demonstrate a complex and not yet fully understood relationship between ILD, particularly chronic HP, and OSA. The study underscores the high prevalence of OSA in patients with chronic HP, emphasizing the need for a more in-depth investigation into quality of sleep and nocturnal oxygenation in these patients. Additionally, similarly to other studies, it highlights the ineffectiveness of sleep questionnaires in accurately identifying OSA in this population.[4,10,11] Despite the high prevalence, systematic screening for OSA among patients with chronic HP is not currently justified. Studies assessing the impact of OSA treatment in individuals with chronic HP may, in the future, determine the utility of systematic OSA screening.

AUTHOR CONTRIBUTIONS

Both authors equally contributed to the writing and reviewing of the manuscript and approved the final version of the manuscript.

CONFLICTS OF INTEREST

None declared.

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1. Laboratório do Sono – LIM 63 – Divisão de Pneumologia, Instituto do Coração – InCor – Hospital das Clínicas, Universidade de São Paulo, São Paulo (SP) Brasil.

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