



Difficulties and countermeasures in the field of sleep medicine during the pandemic

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The coronavirus disease 2019 (COVID-19) pandemic has had far-reaching effects on healthcare systems worldwide, leading to significant disruptions in various aspects of medical care. To avoid physical contact with others, governments urged their citizens to stay indoors. As a result, patients hesitated to visit hospitals, and, in many cases, the proper time to diagnose a disease may have been missed [1]. Sleep medicine is no exception. Many patients lost the opportunity to have sleep disorders diagnosed due to COVID-19. In particular, since close contact between medical staff and patients is unavoidable with polysomnography (PSG), many institutions had to stop providing sleep studies at the onset of the pandemic [2]. Although some institutions gradually resumed sleep testing as the community adapted to the pandemic, clinical evidence from medical data involving sleep tests performed in the middle of the pandemic is quite scarce.

In the current issue, Murase et al. shed light on the impact of the pandemic on diagnostic sleep testing and its potential implications for outcomes regarding patients in their observational study conducted in a university-affiliated hospital [3]. The study compared the periods before and during the pandemic, analyzing the number of patients who underwent a diagnostic sleep study within 90 days of their initial consultation with a sleep physician. There was a significant decrease in the number of patients undergoing a sleep test during the pandemic. Only 53.3% of patients who were recommended to have sleep testing underwent PSG during the pandemic, compared to 81.3% before the pandemic. These findings suggest a substantial reduction in the diagnosis

of sleep apnea during the pandemic. Several factors were associated with the declining number of PSG tests during the pandemic. Older age and having a consultation during the months of the full-blown pandemic characterized by a large number of newly confirmed COVID-19-positive cases were correlated with a higher likelihood of declining PSG tests. The fear and uncertainty regarding the pandemic, coupled with an increased risk of exposure to COVID-19 in healthcare settings, likely contributed to patients' decisions to decline in-lab diagnostic studies.

I believe that the results presented in this paper are consistent with what many sleep physicians experienced during the pandemic. The implications of the reduction in diagnoses of sleep apnea during the pandemic are concerning. Sleep apnea is a treatable condition, and timely diagnosis is crucial for implementing appropriate interventions, such as continuous positive airway pressure (CPAP) therapy. Failure to diagnose and treat sleep apnea can lead to a range of healthcare complications, including cardiovascular disease and brain infarction [4, 5]. In addition, it was recently reported that a recent diagnosis of OSA requiring treatment was associated with an increased hazard of testing positive for COVID-19 [6]. It is essential for healthcare systems to address the challenges posed by the pandemic and ensure the continuity of care for patients with sleep disorders. In Ontario, Canada, where the study by Murase et al. was conducted, in-lab PSG has been required to purchase a CPAP device with governmental funding/re-imburement. The authors stated that a transition from relying solely on in-lab PSG to home sleep studies is needed to maintain clinical services for sleep apnea during a pandemic. Since many promising devices have been developed recently that allow screening for sleep apnea at home [7], a large-scale study to examine clinical outcomes and costs of diagnosing and treating sleep apnea based on the results obtained from studies of these devices may be necessary to address the unprecedented crisis of a pandemic.

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With the advent of vaccines and public health measures, we are overcoming the COVID-19 pandemic. However, we do not know when we will encounter the next pandemic. We must share the problems and difficulties that we encountered in the clinical practice of sleep medicine during the pandemic as Murase et al. did in the current issue and discuss and verify effective countermeasures.

Declarations

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