

LETTERS TO THE EDITOR

The “Traffic Light OSA-SARS”: a tool for the management of obstructive sleep apnea in the pandemic era

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The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic resulted in the shutdown of obstructive sleep apnea (OSA) management throughout the world. Based on data aimed at containing the spread of the virus, different approaches were proposed in Europe and the United States for the reopening of sleep laboratories.¹ The extensively summarized procedures and precautions are not so “friendly” in guiding health workers in managing OSA objective testing and positive airway pressure (PAP) titration in the usual daily activities during the SARS-CoV-2 era. The Italian OSA SARS-CoV-2 Working Group (Ita-OSA-SARS-CoV-2-WG), as mandatory government guidelines and local health care facilities were adopted to minimize the spread of viral infection, established recommendations to ensure workplace safety and establish safety measures for patients and for health workers. The Ita-OSA-SARS-CoV-2-WG, in agreement with the clinical practice guideline of the American Academy of Sleep Medicine^{2,3} and scientific national recommendations,¹ stated that objective testing and treatment of OSA must be carried out, even during the SARS-CoV-2 pandemic. Indeed, OSA must be treated to protect these patients from the risk of cardiovascular and cerebrovascular complications, perioperative complications, and/or occupational or road accidents.³ Furthermore, the treatment of OSA appears to be associated with a better prognosis if SARS-CoV-2 infection occurs.⁴ The working group also stated that the diagnosis of OSA must be carried out with devices that allow the direct measurement of the oronasal airflow and that the practice of telemedicine should be preferred. The Ita-OSA-SARS-CoV-2-WG also proposed a friendly “Traffic Light OSA-SARS” table (Table 1) as a tool for the management of OSA, especially for sleep laboratories who only care for outpatients. The procedures for OSA objective

testing and PAP titration in the current pandemic era used by home care providers have been considered. Utilizing a color scale, as in traffic lights, the “Traffic Light OSA-SARS” provides a guideline for OSA management during the SARS-CoV-2 pandemic, including recommended actions and procedures (green color), alternative actions or procedures (yellow color), and not suitable actions or procedures (red color). The “Traffic Light OSA-SARS” is also used for the management of non-OSA sleep breathing disorders. The sleep laboratories at which the members of the Ita-OSA-SARS-CoV-2-WG are employed are located throughout the Italian territory.

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Table 1—The “Traffic Light OSA-SARS” summarizes actions and procedures for OSA objective testing and PAP titration during the SARS-CoV-2 pandemic.

	Recommended (Green)	Alternative (Yellow)	Not Suitable (Red)
Outpatient visit	Telephone screening for SARS-CoV-2 infection before visit†	Screening for SARS-CoV-2 infection the day of the access	Perform visit if SARS-CoV-2 infection is suspected or diagnosed
	Body temperature measurement	Body temperature measurement	
PSG/HST	Nasopharyngeal swab before testing with†: <ul style="list-style-type: none"> • HST • PSG in a dedicated single room of the laboratory in complicated OSA 	If nasopharyngeal swab testing not performed: <ul style="list-style-type: none"> • HST at home* • PSG in a dedicated single room of the laboratory in complicated OSA* 	Perform test if SARS-CoV-2 infection is suspected or diagnosed
	Airflow measurement with both: <ul style="list-style-type: none"> • disposable nasal cannulas • disposable thermistor 	Airflow measurement with both: <ul style="list-style-type: none"> • disposable nasal cannulas • thermistor‡ 	
	Disposable pulse oximeter sensor	Pulse oximeter sensor‡	
	Disposable thoraco-abdominal band	Thoraco-abdominal band‡	
	Disposable electrodes	Electrodes‡	
	Snoring detection with microphone	Snoring detection with disposable nasal cannula	
PAP titration	Nasopharyngeal swab before titration†: <ul style="list-style-type: none"> • at home using telemonitoring • in a dedicated single room of the laboratory in complicated OSA 	If nasopharyngeal swab testing not performed, titration: <ul style="list-style-type: none"> • at home using telemonitoring§ • in a dedicated single room of the laboratory in complicated OSA§ 	Perform titration if SARS-CoV-2 infection is suspected or diagnosed
	Disposable calibers for the interface choice	Calibers for the interface choice‡	
	Disposable circuits and masks	Circuits and masks‡	
	Disposable filter within the circuit	Disposable filter within the circuit	
	Do not use the humidifier	Do not use the humidifier	

†Preferably 24 hours before the objective testing or PAP titration; however, not earlier than 48 hours prior to the procedures. *Seventy-two hours quarantine device before the objective testing. ‡After sanitization according to local adopted health care facilities. §Seventy-two hours quarantine PAP device before the titration. HST = home sleep testing, OSA = obstructive sleep apnea, PAP = positive airway pressure, PSG = polysomnography, SARS-CoV-2 = severe acute respiratory syndrome coronavirus 2.

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DISCLOSURE STATEMENT

All authors have seen and approved the manuscript. The authors report no conflicts of interest.