

Considerations About Oral Appliance Therapy During the COVID-19 Pandemic

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The recent article published by Schwartz et al. entitled “Oral appliance therapy should be prescribed as a first-line therapy for OSA during the COVID-19 pandemic”¹ is opportune and welcome. We would like to endorse their statements and call attention to further aspects.

The article adds significant information in respect of the current approach to treating obstructive sleep apnea (OSA) during the COVID-19 pandemic. This is particularly important, as we still know relatively very little about the transmission and dissemination mechanisms of COVID-19. Recent studies have suggested that there is a relationship between COVID-19 and OSA², which reinforces the need to discuss the most suitable approach to the treatment of sleep-disordered breathing during the pandemic.

The authors stated that currently the American Academy of Dental Sleep Medicine (AASDM) has recommended oral appliance therapy (OAT) as the first-line therapy for the treatment of the OSA, especially for adult patients who prefer alternative therapies to positive airway pressure (PAP). Other Sleep Medicine societies, including the Brazilian Sleep Odontology Society (ABROS), the World Sleep Society (WSS) and the American Academy of Sleep Medicine (AASM), have also released similar guidelines, at least in respect to mild cases.

OAT devices have important benefits in comparison with PAP devices, including:

1. They do not generate aerosol, which theoretically might increase the chance of infection
2. They are easy to disinfect, and do not pose a risk of possible reinfection
3. Their use is associated with higher compliance rates.

The authors of the article highlighted the warning given by the AASM that PAP therapy has the potential to expose those who are near OSA patients to an increased risk of COVID-19, if the patients are themselves infected.

Another important point to consider is that sleep medicine services were reduced by almost 80% during the first months of the COVID-19 pandemic in Europe, and many facilities may still be closed, or working under technical restrictions. This makes PAP titration in the sleep laboratory difficult, as they are often now only able to

assess a limited and highly selected number of patients³. Thus, these logistical and operational issues reinforce the benefits of OAT over PAP.

We, in general, support the use of OAT, not only during the COVID-19 pandemic, but also as a first-line of treatment for mild and moderate OSA^{4,5}. However, we stress the need to remain aware of the criteria for the proper use of OAT, taking into consideration its indications and contraindications, the patient’s individual characteristics, and the presence of comorbidities⁶, and ensure that the diagnosis of OSA is made by a physician who is a registered sleep-specialist⁷.

To prioritize the use of OAT for the treatment of OSA during the COVID-19 pandemic, odontology professionals need to pay particular attention to patient protection and hygiene measures. These measures should be clearly explained to the patients in order to assure the safety of the procedures. It is of utmost importance that appropriate and comprehensive individual protection equipment (IPE) is used, and that strict hygiene measures in respect of the working environment are taken. All surfaces must be disinfected with alcohol with, at least a concentration of 62%, and 0.5% of hydrogen peroxide or 1,000 ppm (0.1%) of sodium hypochlorite^{8,9}. In the waiting room, patients should keep a minimum distance of 1.5 meters from one another, and there should be an interval of at least 30 minutes between appointments to avoid overcrowding and allow enough time for the disinfection of the environment. If possible, there should be natural ventilation to avoid the use of air conditioning.

These protection and disinfection measures, and compliance with all recommendations from sanitary authorities, can help to make the patients feel safe in their search for treatment and follow-up OAT therapy. We add our support to the recommendation given by Schwartz et al., and sleep medicine societies worldwide that OAT should be the first-line of treatment of mild and moderate OSA during the COVID-19 pandemic.

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DISCLOSURE STATEMENT

The authors have no conflicts of interest to disclose.