



# Role of Oral Appliances in Sleep Apnea



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## Editorial

Sleep apnea (or sleep apnoea in British English) is a sleep disorder characterized by abnormal pauses in breathing or instances of abnormally low breathing, during sleep. There are different types of apnea, Obstructive sleep apnea, Central sleep apnea and mixed. Obstructive sleep apnea (OSA) is the most common category of sleep-disordered breathing. Obstructive sleep apnea syndrome (OSAS) is characterized by recurrent episodes of cessation of respiratory airflow during sleep due to collapse of the upper airway (UA) at the level of the pharynx [1].

There symptoms are loud snoring, awakening with a dry mouth or sore throat, morning headache, excessive daytime sleepiness (hypersomnia), attention problems, irritability. The two most common therapies used to treat obstructive sleep apnea (OSA) are: (1) continuous positive airway pressure (CPAP), and (2) oral appliances. Oral appliances categorized as, soft palate lifters (SPL), tongue retaining devices (TRD), and mandibular advancement appliances or splints (MAA or MAS). MAS are used more commonly than other oral appliance [2].

A TRD uses a pliable silicon bulb fitted over a protruded tongue and held in place by suction, supported additionally by the teeth and soft tissues. This forward posture of tongue prevents it from collapsing back into the oropharyngeal airway and maintains a patent air passage at the level of site of airway collapse. MAA are designed to reposition the mandible forward and support this protrusive posture during sleep [3].

This approach of action is most likely involves a structural change to the pharynx enlarging the retroglottal airway via forward displacement of the tongue or lateral airway expansion. Several

studies had been done to prove the efficiency of these appliances, in treatment both snoring and OSA [4]. According to Kushida et al. [5], American Academy of Sleep Medicine suggested OA therapy as a first-line treatment in patients with mild to moderate OSA and for patients with more severe OSA who fail treatment attempts with CPAP therapy. Every treatment modality has its pros and cons. Excessive salivation, mouth, and teeth discomfort are the most common side effects reported with MAA. Treatment decisions should be carefully planned with assessment of multiple factors in each case of OSA because every patient is different sign and symptom. Sleep physicians should understand the importance of multidisciplinary approach of dentist in this field and gives requires cooperation to treat the condition.

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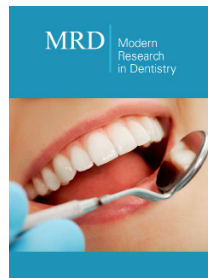
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