Obstructive sleep apnea (OSA) is a serious, life-threatening disorder that is characterized as a series of episodes in which a person stops breathing for 10 seconds or longer during sleep. Sleep disordered breathing is a term which includes simple snoring, upper airway resistance syndrome, and sleep apnea. Patients present with various symptoms, although almost all complain of snoring, witnessed breathing pauses, and excessive daytime sleepiness. Simple snoring is a common complaint affecting 45% of adults occasionally and 25% of adults habitually and is a sign of upper airway obstruction. Sleep apnea has also been identified as a possible risk factor for hypertension, dysrhythmias, depression, ischemic heart disease, and stroke. So how could someone know if she had sleep apnea? Snoring is the major indicator, but not all symptoms are so obvious and audible. A dentist can easily detect the less evident symptoms of sleep apnea and snoring at an early stage. Obesity is the main predisposing factor for OSA. In non-obese patients, craniofacial anomalies like micrognathia and retrognathia may also predispose to OSA. Other orofacial features that may predispose to OSA, include enlarged palatine tonsils, enlarged uvula, high-arched palate, nasal septal deviation, longer anterior facial height, steeper and shorter anterior cranial base, disproportionately large tongue, a long soft palate, and decreased posterior airway space. This predisposing factor could easily be evaluated by dentist through a candid conversation with a patients during their primary dental checkup. Moreover their craniofacial characteristics could more easily be evaluated by orthodontist with their routine cephalometric or CBCT evaluation. A dentist may suspect a patient suffers from sleep apnea if the patient complains about lethargy, morning headaches, or dry mouth (specially caused by open mouth breathing during sleep). Dentists are often the first professional to become aware of a potential problem since they are usually in contact with their patients more frequently then physicians. Dentist will then send patients with symptoms of sleep apnea to a sleep medicine specialist who will assess and confirm the patient condition and severity by polysomonomogram (PSG).

Treating a patients with OSA conventionally involve either continuous positive airway pressure (CPAP) by mechanically which often suffer from poor patients compliances due to portability problems, pump noise, dryness of airway, and mask discomfort or surgical correction craniofacial structure to reshape upper airway. Moreover oral appliances offer an effective alternative to continuous positive airway pressure (CPAP) in the treatment of obstructive sleep apnea (OSA). Oral devices are basically thermoplastic materials with retainers and supports like mandibular repositioning or advancement device (MRD/MAD), tongue repositioning or retaining devices (TRD), soft palate lifter, tongue trainer. These oral appliances are often designed and custom made by dentist. The American Academy of Sleep Medicine (AAOSM) has recommended oral appliances for use in patients with primary snoring and mild to moderate OSA. 1.5% of patients with OSA have a space-occupying problem that can be directly attributed to their sleep-related upper airway obstruction requiring surgical correction of upper airway that often done by maxillofacial surgeon or by otolaryngologist. Thus role of dentist in OSA cases involve from initial diagnosis to final management. To emphasize dentist role more prominently American Academy of Dental Sleep medicine (AADSM) recently form and start working conjointly AAOSM, and going to publish their journal on that.
specialty from 2014 titled Journal of Dental Sleep Medicine (JDSM).


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