

Routine screening for sleep apnoea by dentists now recommended

BDJ volume 224, page 675 (11 May 2018)

Dentists interested in sleep medicine can play a more extensive role in diagnosing and treating patients who suffer from sleep-related problems, according to Professor Ama Johal, the British Orthodontic Society (BOS) authority on dental sleep medicine and Vice-President of the British Society of Dental Sleep Medicine.

Professor Ama Johal explained that sleep-related breathing disorders can range from 'simple' snoring to obstructive sleep apnoea (OSA), a serious medical condition characterised by repeated collapse of the pharyngeal airway at night, leading to sleep deprivation. Exhaustion is not the only side effect. There is evidence that sleeplessness can act as an independent risk factor for Type II diabetes and cardiovascular disease. OSA is associated with a significant cardiovascular and metabolic co-morbidity, impaired quality of life, and increased risk of car accidents.

Professor Johal said: 'Managing patients with OSA is very much the domain of multi-disciplinary clinics, within which the dental profession now has an established role. We regularly see patients with more serious sleep-related problems but where the problems are milder, colleagues in general dental practice can manage their treatment'.

Professor Johal says that there is now a clearer diagnostic and referral pathway with improved techniques for treating patients who have mild-moderate sleep apnoea or snoring problems. He is encouraging dentists to screen for sleep-related problems and OSA as a matter of routine.

For those with symptomatic OSA, the first line therapy is continuous positive airway pressure (CPAP) in view of its proven treatment effect. This involves the patient wearing a mask attached to a pump, which filters, humidifies and directs air under pressure into the upper airway, in an attempt to prevent its collapse throughout the night.

However, the limitations of CPAP are compliance, which can be very poor, and in some patients may not resolve the OSA. However, there have been improvements in mandibular advancement appliances (MAA), a custom-made mouthguard, which works by posturing the lower jaw forward, keeping the airway open.

The advantage of the latest design of MAA is that they permit the mandible to be advanced in a step-wise manner, so the amount of advancement can be tailored to the specific needs of the individual. This has been scientifically demonstrated as being important and beneficial.

Appliances which permit the patient to adjust the jaw protrusion in small progressive movements (0.5 mm) allow for a precise effective point to be determined, referred to as 'mandibular titration'. The benefits are that patients can then adapt at a more gradual rate to their appliance, which in turn can improve their acceptance, helping to achieve the high rates of compliance achieved with these devices. Furthermore, unwanted tooth movement which can be caused by MAAs is minimised.