

Standard of Practice: Non-surgical Management for Sleep Disordered Breathing

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Introduction

The purpose of this document is to establish a Standard for dentists who provide sleep disordered breathing treatment to adult and pediatric patients.

Sleep-Disordered Breathing: A broad term that encompasses both sleep-related breathing disorders (e.g., obstructive sleep apnea) and other abnormalities of respiration during sleep that do not meet the diagnostic criteria for a disorder (e.g., snoring). [Citation: AASM Style Guide for Sleep Medicine Terminology Updated November 2015]

Commonly used terms for a sleep appliance include, but are not limited to: mandibular advancement device, mandibular repositioning device, mandibular advancement splint, mandibular advancement appliance and oral appliance. Throughout this Standard, the term "Mandibular Repositioning Device" is used to refer to the different types of appliances, devices and splints used in sleep disordered breathing treatment.

The use of a Mandibular Repositioning Device for sleep disordered breathing treatment can only be provided and managed by a dentist who is trained in dental sleep medicine.

Obstructive sleep apnea is a form of sleep disordered breathing and is a chronic disorder which can only be diagnosed by a sleep medicine physician. Many factors contribute to obstructive sleep apnea including, but not limited to, medical comorbidities, soft tissue abnormalities, bony and jaw deformities and muscular tone abnormalities (muscular dystrophy, cerebral palsy among others). There are several conditions, including obesity, jaw deformities and age that can contribute to increased incidence.

A multidisciplinary collaborative approach is required in which dentists trained in approved dental sleep disordered breathing treatment work with sleep medicine physicians and dentists trained in dental sleep medicine work collaboratively with each other to provide an effective work flow in which patients with undiagnosed obstructive sleep apnea can be screened, diagnosed and treated with the appropriate treatment modality.

The Alberta Dental Association and College will review educational programs, teaching faculty, and/or training materials to determine if those educational and training programs and faculty satisfy the requirements of this Standard.

Standard of Practice

- 1. A dentist cannot diagnose sleep disordered breathing. Diagnosis of sleep disordered breathing can only be made by appropriate sleep medicine physicians.
- 2. Only a dentist with appropriate training approved by the Alberta Dental Association and College in sleep disordered breathing can provide a mandibular repositioning device (MRD) for treatment of sleep disordered breathing.
- 3. A dentist may order, request, prescribe, own and dispense equipment for sleep testing for the purpose of assuring efficacy of an MRD and for submission to a sleep medicine physician for screening and diagnosis of sleep disordered breathing.
- 4. Prior to providing sleep disordered breathing treatment, a dentist must obtain:
 - a. a copy of the sleep record or the polysomnographic analysis and the sleep apnea diagnosis, the physician's recommendations, and the assessments of concomitant conditions (e.g. bruxism, hypertension or periodic limb movements);
 - b. formal documentation with an extensive clinical assessment including general health, with comprehensive medical and sleep related history. This may include but is not limited to cardio-vascular health, body mass index (BMI), diabetes, mood disorders and other associated comorbidities; and
 - c. in cases of isolated snoring, proper level 1 or level 3 testing by a sleep medicine physician is mandatory to appropriately diagnose or rule out obstructive sleep apnea.
- 5. A dentist who provides sleep disordered breathing treatment must maintain the following in the patient record:
 - a complete and current medical-dental history which includes: age, weight, height, neck and belt circumference as indicated, the presence of tonsils, tongue size, palate width and depth, malocclusion classification (including overjet and overbite measurements), the presence of tooth erosion or tooth wear, medications, and presence of other disease (similar to a general detailed medical history);
 - b) assessment of sleepiness (e.g., the Epworth Sleepiness Scale (ESS) or Pediatric Sleep Questionnaire (PSQ) as required);
 - c) soft tissue/ intraoral assessment;
 - d) periodontal evaluation;
 - e) temporomandibular joint examination;
 - f) assessment of concomitant bruxism (tooth grinding and/or clenching), orofacial pain, and/or headaches;
 - g) occlusal examination and recording of existing condition;
 - h) record of examination of teeth and restorations;
 - i) initial dental radiographs are indicated. Cephalometric and panoramic radiographs are required as a pre-treatment record. Although, cone-beam computed tomography and/or other computed tomography could provide helpful information, at this time they are not required;

- i) diagnostic dental models;
- k) record of previous use of any Mandibular Repositioning Devices or other dental devices;
- I) informed consent discussions and documentation, as outlined below; and
- m) while baseline photographic records are not required be taken, it is highly recommended that they be taken to assist in tracking dental changes.
- 6. The patient must be provided with comprehensive explanations and information on sleep behavioural therapy including, but not limited to: sleep hygiene, sleeping position, weight control, alcohol intake, diet and lifestyle. The dentist must document these discussions with the patient in the patient record.
- 7. The dentist must:
 - a. propose appropriate Mandibular Repositioning Devices to the patient, according to the patient's oral health status and craniofacial morphology;
 - b. educate the patient as to the type of Mandibular Repositioning Device being considered and all alternatives (e.g., continuous positive airway pressure therapy, surgery, or positional therapy);
 - c. provide positional therapy information and education on treatment options for a patient with positional obstructive sleep apnea; and
 - d. document these discussions with the patient in the patient record.
- 8. The dentist must explain the proposed treatment and discuss the need for ongoing and long-term monitoring with the patient prior to initiating any treatment. Such discussions must be documented in the patient record.
- 9. Informed Consent must be obtained in writing, before fitting the Mandibular Repositioning Device. The consent form must clearly indicate the potential and probable side effects of using the Mandibular Repositioning Device and appliance longevity.
- 10. If the patient or the dentist decides that occlusal changes are undesirable, the patient must be informed of other options for management of their condition which could include continuous positive airway pressure (CPAP)/bilevel positive airway pressure (BiPAP), soft tissue or maxillomandibular advancement jaw surgery with an oral and maxillofacial surgeon.
- 11. The dentist must oversee the Mandibular Repositioning Device treatment in the adult patient with obstructive sleep apnea, to survey for dental related side effects or occlusal changes and reduce their incidence.
- 12. When Mandibular Repositioning Device treatment is prescribed by a sleep medicine physician for an adult patient apnea, the dentist must use a custom, titratable appliance over a non-custom oral device.
- 13. Use of non-custom or temporary Mandibular Repositioning Devices as a diagnostic tool is not recommended.

- 14. On-going monitoring, follow up testing and evaluation of treatment for adults and pediatric patients is required and must be documented in the patient record.
- 15. A patient who is treated with a Mandibular Repositioning Device must be followed to monitor oral hygiene when wearing the appliance and to ensure regular and correct use as well as any adaptations or side effects and such monitoring must be documented in the patient record.
- 16. Pediatric treatment for sleep disordered breathing cannot be initiated without appropriate screening and confirmative diagnosis and involvement of the pediatric sleep team. The pediatric patient's diagnosis must be done in collaboration with a sleep medicine physician either at the provincial hospital based sleep centres or those that provide specific care to the pediatric patient.
- 17. While Mandibular Repositioning Devices are commonly used for treatment of obstructive sleep apnea in adults, caution must be undertaken with prescribing this as a treatment option in a pediatric patient. First, the underlying cause of sleep apnea may differ in children than adults which may render oral appliance therapy ineffective. Second, the effects on long term growth must be considered until the completion of growth and until the pediatric patient can provide informed consent (age 18 or mature minors). Due to the differences in diseases etiology and significant long term consequences of modifying growth in a peripubertal pediatric patient, treatment using a Mandibular Repositioning Device can only be rendered by properly trained dental specialists (including orthodontist, pediatric dentists and oral maxillofacial surgeons), and may necessitate a multidisciplinary team approach, including the pediatric sleep medicine specialist.
- 18. Dentists who work with pediatric patients must be trained on symptoms and appropriate screening questions to facilitate awareness and diagnosis on pediatric growth and development due to the longstanding consequences of sleep disordered breathing.
- 19. Dentists who offer treatment for sleep disordered breathing must be able to demonstrate competency in this field. Knowledge and previous use of various appliances and orthotics are highly recommended.
- 20. Dentists must continuously update their knowledge by participating at diverse meetings and conferences, or by taking continuing education courses on sleep disorders and sleep apnea.



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