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Editorial Open Access

Obstructive Sleep Apnea in Children: Why Screen?

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Editorial

Obstructive sleep apnea (OSA) is a disorder of breathing and according to the American Academy of Sleep Medicine (AASM), OSA is characterized by repetitive episodes of complete or partial upper airway obstruction occurring during sleep. These repeated and short cessations in breathing are called apneas and may be caused by airway obstruction resulting from tonsils, uvula, redundant or fatty throat tissues and even blocked nasal airway etc.

OSA can affect anyone at any age, and in children, it is thought to be most common at ages 2-7 years [1] and if left untreated, may have severe consequences including neurocognitive impairment, behavioral problems, failure to thrive, growth failure, cardiovascular effects, including cor pulmonale, ventricular dysfunction, systemic hypertension etc. [2,3]. Risk factors for OSA are adenotonsillar hypertrophy, obesity, craniofacial anomalies, neuromuscular disorders, nasal abnormalities, increased waist and neck circumference, familial history, asthma, pre-term birth and so on. Some of the symptoms include habitual snoring, disturbed sleep, enuresis, awkward sleeping posture, daytime neurobehavioral problems and decreased academic performance [2-5].

OSA is a hidden health crisis, which is not only underdiagnosed but also undertreated [4]. While there are costs involved in the diagnosis and treatment of OSA, they are considerably lower than the costs associated with leaving the disorder untreated. Failure to treat OSA may increase the likelihood of disease-associated comorbidities [4]. The gold standard for the diagnosis of OSA is a sleep study called polysomnography and it is recommended in children and adolescents with signs and symptoms of OSA [3-6]. OSA in adults is characterized by episodes of airway obstruction for at least 10 seconds or more during sleep, resulting in breathing pauses. However in children, apneas of 3-4 seconds' duration are enough to cause oxygen desaturations [5]. Therefore, polysomnographic guidelines to diagnose OSA in children are not the same as those in adults [1-8].

Treatment options for OSA include continuous positive airway pressure (CPAP), surgery, oral appliances and lifestyle changes like body posture during sleep and weight loss [4].

Because of these serious and detrimental consequences of undetected and untreated OSA, it is of paramount importance to screen children for OSA. Tonsil and adenoid hypertrophy are generally acknowledged as the most common etiological factors of OSA in children, so dentists can play an important role in identifying adenotonsillar hypertrophy during examination [1-3]. Additionally, they can incorporate a questionnaire in the patient history forms to screen for the symptoms of OSA. For instance, Pediatric Sleep Questionnaire [6] has a good diagnostic accuracy and dentists may use it as a screening tool to identify the related symptoms of OSA. High-risk patients should be referred to sleep specialists [7] so that diagnosis and treatment of OSA may be done in a timely manner.

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