

Masticatory Function Abnormalities Resulting from Sleep Bruxism in Children

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Bruxism is a condition in which an individual will clench and grind their teeth. There are two types of bruxism: sleep and awake bruxism. Sleep bruxism is common in children starting at the age of 4 and leads to developmental masticatory abnormalities associated with juvenile bruxism. This review used primary sources to compile and compare the different potential causes of sleep bruxism in juveniles. Research revealed that neurological development plays a significant role in the early development of children and that stress and anxiety contribute to the number of children experiencing bruxism. In addition, temporomandibular dysfunction, a pain or abnormal movement condition within the jaw, also contributes to children experiencing bruxism. Medical treatments are limited for juveniles, however some treatments, such as light emitting diodes, have shown some success. In addition, neurological development and temporomandibular dysfunction play a role in children developing abnormal masseter motor functions, and these factors, as well as abnormal stress levels, contribute to sleep bruxism. A significant limitation of sleep bruxism studies in children is that most data were based on parent reports, which allows for potential bias in bruxism diagnoses. This review advocates for additional research surveying children about their experiences and any symptoms of sleep bruxism. These surveys should be followed by comprehensive dental exams, including the height of the teeth, to determine any differences from grinding and potential loss of tooth mass at each visit that could indicate sleep bruxism.