**THE ROLE OF FUNCTIONAL ORTHOPEDICS IN THE MANAGEMENT OF PEDIATRIC SLEEP BREATHING DISORDERS.**

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**ABSTRACT** (250-300 words)

**Background**: The anatomical changes resulting from chronic mouth breathing during a child's active craniofacial development directly impact the respiratory system. Therefore, patients with mouth breathing often do not have space to accommodate the tongue or other structures, such as the palatine and lingual tonsils, which can become obstructive elements during sleep. Limited airway space can also prevent patients from maintaining adequate airway patency while they go through the natural stages of sleep and relax their muscles. The combination of these elements can lead to restricted air flow during sleep, leading to frequent awakenings and a drop in blood oxygen saturation , which is called Obstructive Sleep Apnea (OSA).

Functional Orthopedics (FO) is an excellent resource for minimizing, preventing or correcting craniofacial changes resulting from RO. FO allows the vertical, transverse and sagittal construction of the upper and lower jaw by changing the posture of the lower jaw, tongue and overall muscle dynamics. This leads to an increase in the size of the nasal and oral cavities and the entire upper respiratory tract, which leads to the normalization of breathing and changes in facial features. The effect of FO can occur at any age even in primary teeth, as no tooth anchoring is required. Orthopedic therapy has a direct effect on the neuromuscular system hwich controls the bone development of the jaws and thus guides the teeth into the optimal position. FO’s therapeutic arsenal is broad and includes educational measures to promote and guide breastfeeding as well as alternat and vigorous chewing on both sides; occlusal adjustments due to wear or addition of composite (Planas direct tracks) and various types of functional orthopedic devices.

**Objective:** Give a scientifically based lecture on the role of functional orthopedics in respiratory sleep disorders in children

**Methods:** On line presentation

**BIOGRAPHY** (100-150 words)

Machado C. A. O. is a master student in integrated dentistry from Federal University of Uberlândia, Uberlândia Brazil. Specialist in Orofacial Pain and TMD, Functional Jaw Orthopedics, Pediatric Dentistry. Training in Sleep Dentistry. She currently works in his specialties at the RC Odontologia Especializada Dental Clinic. Patrocínio, Minas Gerais.

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