115 - THE BODY DYNAMICS AND ORAL SYNDROME BREATHER IN THE VISION OF PHYSICAL THERAPY: A LITERATURE REVIEW

Maria Carolina Ferreira1
Suelyn Maria Longhi Oliveira2
1. degree in physiotherapy in Pato Branco School - FADEP.
carollina.ferreira@yahoo.com.br
2. Master in Industrial and Systems Engineering - UTFPR
suelynlonghi@hotmail.com

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INTRODUCTION

Normal breathing occurs nasally, where the inspired air is warmed, filtered, humidified and cleaned before reaching the lungs. This breathing pattern is a protection of the upper airways and nasal breathing favors the growth and development craniofacial.1

Factors that exert control over skull growth - facial are classified into intrinsic, local and general epigenetic and general environmental factors genetic. Intrinsic are linked to form inseparable craniofacial tissues. Epigenetic sites are the organs that have their own genetic cause and has influence on the structures to which they relate. General epigenetic are related to sex hormones. general environmental factors are represented by influences originating from the external environment, such as the food supply and oxigênio.2

The functioning of the respiratory system should be improved, since the quality reflected in respiratory muscle performance and a good facial.3

When the inspired air does not pass through the nasal cavity, oral breathing becomes. Oral breathing is a set of signs and symptoms of various causes may occur in the nasal septum deviation, enlarged tonsils and adenoids, habits, hypotonia lift the jaw muscle, nasal trauma, tumors, rhinitis, sinusite.4

Oral breathing may be caused by an obstruction of the upper airways or a simple habit which allows the passage of air through the mouth occurs. This change during inspiration leads to changes in facial growth pattern, also causing morphological changes throughout the organism.1

One of the most common symptoms in children, children with prolonged mouth breathing presents changes in the face exhibiting narrow maxillary arch, dental malocclusion, short upper lip, everted lower lip, sealing of incomplete lips, hypotonia of facial muscles, postural changes, usually show fatigued, with daytime sleepiness, loss of appetite, bedwetting and difficulty in aprendizado.5

The fact that the breathing only occurs through the mouth causes an increase occurs intraoral pressure and so there palate modification, the air does not pass through the nasal cavity and so does not penetrate the maxillary sinuses. These are atresia, also leading to atresia of the upper jaw, causing bilateral crossbite giving the characteristic appearance of the mouth breathing. In a vision headgear, one can observe a "adenoid" face, have the long, narrow face, dark circles, nasolabial folds marked, parted lips and re- dried and hipotônicos.2 This constancy in change of the upper airways affect ventilatory mechanics will lead to muscle and deviations instability across end postural.6

The body structure results keep the momentary position or a change in some physical segment. The body is composed of several parts, and they depend on each other to remain in perfect balance, if a segment deviates from its original position, all other will adjust to compensate for alteração7

The head is regarded as the central point of the displacement body, so that the cervical spine requires a constant force to sustain the puddle weight thereof. The cervical spine has a physiological curvature of approximately 20 ° and when there is an increase that tends to bend their heads protrude ahead of the line ombros.6

The incorrect positioning of the head and cervical spine change entire chain muscular.3

When performing the postural evaluation, there is the position of the head relative to the neck and body, whether or not dental malocclusion, the situation of the temporomandibular joints and standard respiratório.8

The breathing pattern acquired by mouth breathing causes adaptive postural needs. The mouth breathing tends to project the head forward and make a correction in the cervical spine, thus facilitating the passage of air flow through the oral cavity and the pharynx reducing airway resistance. The forward head will lead to an imbalance of the anterior muscle chains, and cross higher, necessitating the use of accessory muscles of respiration which leads to an increase in muscle activity and an intense effort inspiratório.9

The bad cerebral oxygenation leads to lethargy states and headaches, reflecting agitation, impatience and short attention span, which interferes directly in the process aprendizagem.10

A postural change will lead to changes in sensitivity, proprioception and muscular.3 activity

Adopts this approach in order to facilitate breathing. When designing the neck forward, there is a rectifying airway obstructing the passage of air and diminishing the flow to the lungs. When is the elevation of the shoulder blades, the anterior chest region is depressed, which makes short breathing, fast reducing the action of diafragma.11

The filing incorrect or rest position of the tongue can create occlusal disharmony. The resting position of the lips with mouth open or chronic mouth breathing, resulting in inadequate sealing lip, providing a breakdown in the dental arch, leading to poor oclusão.12

The treatment of oral breathing syndrome is based on the performance of teams, with individual approaches taking the needs of each patient aiming at better quality of life. The physical therapy restores the tone of facial muscles, because a change in muscle tone affects the lip seal, and influences the degree of escape salivar.13

Corrects postural changes. The repositioning of the head and cervical spine will reset protrusions shoulders, winged scapula motion amplitude of the rib cage and thoracic kyphosis, consequently increasing airspace, improving ventilation reflecting the improvement of the individual's quality of life.14

METHODOLOGY

This work is of applied nature with a qualitative approach and exploratory objective through a literature review. exploratory studies aim to provide greater familiarity with the problem, in order to make it more explicit or build hypotheses,

includes bibliographical survey and interviews. The same author points out that the descriptive study has as main objective the description of certain population characteristics or fenômeno.15

Enhance, clarify, transform concepts and ideas, considering building more exact problems. This type of research has less stiffness to build a future reference, involves literature search, no standardized assessment and case study is performed when the chosen subject is rarely discussed, making it hard on him formulate answers precisas.16

The present study from a literature review seeks to build a theoretical reference and analyze the effectiveness of physiotherapy to improve the quality of life of an individual with mouth breathing. A literature review was carried out during the year 2018, giving priority to national studies. In order to achieve the objective of the study a survey was conducted in the search for articles published in different databases. As study complement was used books, because of its great importance to the scientific area.

The subject covered in this research project on changes in body dynamics of mouth breathing in the view of physical therapy, will be explored from the studies of the following authors: BIANCHINI, Ana Paula. et al. 2007. Study of the relation between mouth breathing and facial type. COSTA, Rosana Jecilene, et al. 2005. Relation of occlusion with the posture of the head and cervical spine in oral breathing children. Motta, Jansiski Lara et al. 2009.Relação cervical posture and dental occlusion in oral breathing children.

CONCLUSION

In brief discussion about the study, there was no differing opinions among the authors cited. They are heading for the same common point.

This pathology causes morphological changes throughout the body causing negative consequences, leading to a stance that conveys a sense of grief and sadness.

According to authors a performance of multidisciplinary teams is required in the pursuit of better individual quality of life. Studies have shown that the consequences brought about by this disease, directly reflected in the individual's quality of life affecting the same behavior. anxieties and anguish demonstrations reflect the orofacial muscles, changing the reactions of the individual that deals with the feeling of breathlessness.

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ABSTRACT

Oral breathing is a set of signs and symptoms that leads to a change in breathing pattern child. This modification leads to morphological changes throughout the body, causing mandibular retraction, hypotonia of facial muscles, changes in ventilatory mechanics and postural deviation across the end. A posture change proprioception lead to changes in sensitivity and rebalancing of the muscle, favoring the repositioning of the head and cervical spine, increasing the airspace and favoring air flow. Physical therapy can help improve the quality of life of oral breather, as preventive and corrective actions. The breathing pattern implies changes in orofacial structure and dynamics throughout the body, a nasal breathing improves airflow, reducing ventilatory muscle strength, avoiding repetition of respiratory infections as well as improving the tone of the face muscles. The posture correction aids in modifying the structures of oral cervical spine alignment. This study is applied nature with a qualitative approach and exploratory objective through a literature reviewdeveloped from already prepared material, consisting mainly of books and scientific articles.

Key words: mouth breathing, posture, physical therapy.

RESUMEN

La respiration orale est un ensemble de signes et de symptômes conduisant à une modification du schéma respiratoire de l'enfant. Cette modification conduit à des modifications morphofonctionnelles dans tout l'organisme, provoquant une rétrusion mandibulaire, une hypotonie des muscles faciaux, des modifications de la mécanique ventilatoire et une déviation tout au long de l'extrémité posturale. Une modification de la posture entraînera des modifications de la sensibilité à la proprioception et du rééquilibrage des chaînes musculaires, favorisant le repositionnement de la tête et de la colonne cervicale, augmentant l'espace aérien et favorisant la circulation d'air. La thérapie physique peut aider à améliorer la qualité de vie du respirateur buccal, en tant qu'action préventive et corrective. Le schéma respiratoire implique des modifications de la structure orofaciale et, tout au long de la dynamique du corps, un schéma respiratoire nasal améliore la circulation de l'air, diminue la force musculaire ventilatoire, évite les infections respiratoires répétitives et améliore le tonus musculaire facial. La correction posturale aide à la modification des structures orofaciales par l'alignement de la colonne cervicale. La présente étude est de nature appliquée avec une approche objective qualitative et exploratoire à travers une revue de la littérature développée à partir de matériel déjà élaboré, consistant principalement en livres et articles scientifiques.

Mots clés: Respirateur buccal, posture, physiothérapie

RESUMEN

La respiración oral es un conjunto de signos y síntomas que conduce a una modificación del patrón respiratorio en el niño. Esta modificación lleva a cambios morfofuncionales en todo el organismo, causando retrusión mandibular, hipotonía de los músculos de la cara, alteraciones en la mecánica ventilatoria y desvío en toda la extremidad postural. Una modificación postural llevará a cambios de sensibilidad propiacepción y reequilibrio de las cadenas musculares, favoreciendo el reposicionamiento de la cabeza así como de la columna cervical, aumentando el espacio aéreo y favoreciendo el flujo de aire. La fisioterapia puede ayudar en la mejora de la calidad de vida del respirador oral, como acciones preventivas y correctivas. El patrón respiratorio implica modificaciones en la estructura orofacial y en toda la dinámica corporal, un patrón respiratorio nasal mejora el flujo aéreo, disminuyendo la fuerza muscular ventilatoria, evitando infecciones respiratorias de repetición así como la mejora de los tonos de los músculos de la cara. La corrección postural ayuda en la modificación de las estructuras orofaciales por la alineación de la columna cervical. El presente estudio es de naturaleza aplicada con un abordaje cualitativo y objetivo exploratorio por medio de una revisión de literatura desarrollada a partir de material ya elaborado, constituido principalmente de libros y artículos científicos.

Palabras- chaves: Respirador oral, postura, fisioterapia.

RESUMO

A respiração oral é um conjunto de sinais e sintomas que leva a uma modificação do padrão respiratório na criança. Essa modificação leva a alterações morfofuncionais em todo o organismo, causando retrusão mandibular, hipotonia dos músculos da face, alterações na mecânica ventilatória e desvio em toda a extremidade postural. Uma modificação postural levará a alterações de sensibilidade propriocepção e reequilíbrio das cadeias musculares, favorecendo o reposicionamento da cabeça bem como da coluna cervical, aumentando o espaço aéreo e favorecendo o fluxo de ar. A fisioterapia pode auxiliar na melhora da qualidade de vida do respirador oral, como ações preventivas e corretivas. O padrão respiratório implica em modificações na estrutura orofacial e em toda a dinâmica corporal, um padrão respiratório nasal melhora o fluxo aéreo, diminuindo a força muscular ventilatória, evitando infecções respiratórias de repetição bem como a melhora dos tônus dos músculos da face. A correção postural auxilia na modificação das estruturas orofaciais pelo alinhamento da coluna cervical. O presente estudo é de natureza aplicada com uma abordagem qualitativa e objetivo exploratório por meio de uma revisão de literatura desenvolvida a partir de material já elaborado, constituído principalmente de livros e artigos científicos.

Palavras chave: Respirador oral, postura, fisioterapia.