31 - BREATHING AND ATM DYSFUNCTION AND ITS RELATION PHYSICAL PERFORMANCE

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INTRODUCTION

The teeth have to do with sports? This question primarily for the laity seems to have no sense. However it is known that dental problems have a major influence on the performance of athletes can bring great harm to their performance. These problems plague not only the athletes and their performance, but any individual and can hinder you in your daily tasks. Data such as research Oliveira and Lemos (2007) where 37 athletes who comprised the study group, only 17 reported having had oral disease a lifelong sport, handball and they were 8 and 9 canoeing. In response to a question asking if the problem undermined their oral performance in sports, handball and 8 of 9 paddlers who had responded that they had problems, they said yes, respectively, 7 and 3. In question had ceased to practice as a result of this anomaly oral 5 athletes of handball and canoeing and the second when they spoke to compete, the answer was different, where only 2 of the handball and canoeing one left to attend a game or competition , so data showing the occurrence of these problems in the sport that are very relevant.

Among all types of oral health problems that affect humans, this study looked for evidence found on the Mouth Breathing and Temporomandibular Dysfunction (TMD). Evidence such as those cited by Di Francesco (1999), saying the Mouth Breathing for not promoting a preparation of the inspired air, there is a modification of the mechanisms of pulmonary absorption of gases, increased airway resistance and decreased lung compliance by decreasing the use of O2 not only at home, but mainly in the exercise may cause, which is heart failure caused by a large increase in resistance to pulmonary blood flow. This involvement is perceived in the study by Oliveira and Lemos, (2007) which states that with a proper oral health of the athlete the body work better and more efficiently, because the oral conditions have systemic repercussions. Also according to Oliveira and Lemos (2007) in many physical activities, we use a mouthguard, which in turn causes significant changes in aerobic capacity athletes dropping in physical activities, impacted teeth leave the jaw more susceptible to trauma, infectious processes of the oral cavity can spread to the rest of the body.

Other problems caused by mouth breathing for TMD dysfunction are poor posture, as reported Coradona and Alves (1997), saying that some postural problems may be linked to the oral cavity. Souza (2004), reports that losses may be more common, poor utilization of food by chewing and digestion of disability, injury, poor recovery of these lesions, decreased aerobic capacity and early fatigue. In a third study demonstrated by Barreto (2008) where he was assessed 750 children aged 6 to 10 years found 75% as nose breathers and mouth breathers 25% shows that this is not a rare appearance of mouth breathing in their studies Abreu et al (2006) shows another as is the prevalence of TMD in mouth breathers where 43% of the athletes had symptoms of mouth breathing and nasal breathing TMD showed no symptoms and is considered a good factor to TMD related to mouth breathing, agreeing with reports of 7 Oak , where he says that mouth breathing can cause a destabilization of ATM, Another account of the relationship of the TMD Mouth Breathing eat is made by Maciel et al (2003) where he reports that these so-called TMD disorders may lead the individual to become a mouth breather or vise versa. Therefore it is clear the close relationship of TMD to Mouth Breathing

Abreu et al (2006) presents some statistics put the highest importance for research is the mean and standard deviation of estimated VO2 max for the mouth breathers had values of 42.14 ± 1.99 ml (kg.min) -1 and Nasal breathing for an average and standard deviation of 44.39 ± 2.47 ml (kg.min) -1 these values were analyzed by Student's t test with significance p <0.05, obtained a value of 0.08 is not considered significant not agree with results of studies such as Sequeira (2005), where he reports that mouth breathing may have a performance 21% lower than the nasal breathing. Another study reports that 26 villages mouth breathing decreases by 30% for not promoting a good breath, bad night's sleep bed and postural problems. However this difference was found, even though small should take into account the level of performance. All this information led him to promote a research review of this pathology and its relationship to performance.

REVIEW OF BIBLIOGRAPHY.

Under certain findings in the field of dentistry on people who have Mouth Breathing dysfunctions along with the ATM, it was found that there is a huge need for the Physical Education professionals also seek to give greater attention to these problems that beset much of the population, and some of these studies give information of great importance to physical education not only in the area of sports training for athletes of high competitive level, but also for health, which the professional physical education also plays a role .Problems such as those mentioned by Coelho and Terra (2004), individuals with chronic mouth breathing changes have myofascial, postural, socio-emotional, expressive, digestive, phonetic, craniofacial growth and dental occlusion, also show the importance that should be given to this problem.

Ferreira (1999), reports that the Mouth Breathing presents several problems however highlight the individual most associated with performance: a low physical performance, incoordination overall tiredness, insomnia, difficulty with attention and concentration, among others. But in a review by Souza (2004), he talks about the importance of Sports Dentistry in improving the high-performance athletes, he reports that the losses may be more common, poor utilization of food by chewing and digestion of disability, injury, poor recovery of these lesions, decreased aerobic capacity and early fatigue. Such data show the importance of a more detailed study on the Mouth Breathing and TMD dysfunction in relation to performance, since we now know that what defines a result of high level sports are the smallest detail.

MOUTH BREATHING

According Frejman (2004), the man was scheduled to breathe through the nose however some factors may make this change is causing a Mixed or oral breathing and these changes in respiratory pattern can be classified as follows:

- Organic Mouth Breather: mechanical obstruction caused by nasal, oral, and retronasal;

Mouth Breathing

- Functional: addiction caused by breathing through the mouth while not having any kind of obstruction;

- Functional Helpless Mouth Breathing: caused by some neurological disorder, where these individuals often have psychiatric problems.

Frejman (2004) also reports that the permanence of Mouth Breathing aggravates the mechanics of breathing can unbalance the chest muscle and posture. This poor posture compromises breathing because the shoulders will cause a kyphosis anteriorly compressing the chest by decreasing the space inside chest making breathing difficult. According Marchesan (2003) the main characteristics of 17 mouth breathers are anterior shoulders, kyphosis, hyperlordosis, thoracic asymmetry, prominent shoulder blades, sagging facial muscles can make dental malocclusion and others. The most common complaints brought by patients who breathe through the mouth, refer to shortness of breath or respiratory failure, fatigue faster in physical activity, back pain or neck muscles, and decreased sense of smell or taste, halitosis, dry mouth, waking lot during the night choking, sleep poorly, daytime sleep, dark circles, splashing saliva when speaking, difficulty in physical exercise like running, playing ball, etc..

Pedro (2005) says that the mouth breathers, are usually very upset, humor difficult. Agitated and impatient and had little time for breastfeeding. His sleep is restless and choppy. Probably because of the lower cerebral oxygenation. They are filled with nightmares, usually. At bedtime begin their difficulties: can not sleep in the position you want, but you can position, ie in the prone or side, to maintain that position and not be drowned in just pillow for supporting the head with his hand on face, then facilitating the installation of crossbite and facial asymmetry. Statistics show that the sleep disorder affects 25% of the population being the most frequent apnea. . According to DiFrancesco (2004) Mouth breathing is a frequent symptom in childhood. The oral breathing syndrome is characterized by tiredness, sleepiness, weakness, low appetite, bedwetting and even learning and attention deficit.

Oliveira (2005) says the 19 symptoms of mouth breathing are numerous and not always present simultaneously in the same individual, according to Pedro (2005), the mouth breathers also have symptoms, including snoring and apnea, which are unpleasant and frustrating, affecting the quality of daily life and, without treatment, can evolve into depression with or without suicidal tendencies, which may interfere with motor performance and ability to concentrate, putting the patient and others at risk and disturbing social life doing the same a need for a multidisciplinary study. Also in reports of Oliveira (2005) where he demonstrated in an experimental study that head posture is dependent on the breathing pattern. To this end, they selected 30 people and induced mouth breathing using a nasal clamp type for swimmers for 2 hours. After the snap clip on the nose, the absence of nasal breathing was confirmed by applying a cold mirror under the nostrils clogged during heavy breathing and relaxation. Another 31 volunteers were subjected to visual deprivation, with a mask of gauze and tape, for its effect on head posture for 1 - ½ hours. Ten of these volunteers had nasal clip and mask together during the experimental period (1 - ½ hours). They noted that there is progressive extension of the head usually accompanied by a separation between the maxilla and mandible, reaching a peak in about 1 to 1 ½ hours after the introduction of the stimulus.

Marchesan (2003) states that the joint work already being done in the last decade in a more systematic, has been much more efficient. Changes in shape and / or function, when treated by a team may or may not be resolved because the resolution of problems is also that there are time dependent. Marchesan (2003) also says that it is worth remembering that not all of these changes are present in the same patient, and that will be more serious and more of the extent that care is delayed or that there are genetic predispositions for them to develop. According to Oliveira (2005), there are several methods of assessment of nasal obstruction, the most accurate and recent are: acoustic rhinometry to evaluate the nasal cavity geometry (dimensions of area and volume) and pressure rhinometry and flow analysis for flow and resistance the upper airway. Both are non-invasive tests and of short duration, about 25 minutes, which, when combined, produce a good diagnosis of the general terms of morphology and function of the nasal cavity.

TEMPOROMANDIBULAR DYSFUNCTION

In a study by Leite and Neto (2005), with a sample composed of 38 athletes aged 14 to 18 years, a team of female football field which underwent a postural assessment, following the principles of a protocol of the method RPG Souchard in order to observe possible postural changes that could predispose them to injury. These athletes were followed in training and competitive games to observe the incidence of injuries, recording all the events for a period of six months. The results were that the groups of injured athletes, 82% had changes in posture that can increase the risk of injury, while in the group of non-injured athletes during the games, only 2% of them had postural changes. This result shows the higher incidence of injuries in athletes with postural deviations. So the evidence demonstrated by showing that the incidence of sports injuries are directly related to postural changes present in athletes. What emphasizes the importance of the Global Posture Reeducation Sports Physiotherapy and injury prevention. Leite and Neto (2005) can therefore conclude that all 15 athletes should receive a comprehensive postural evaluation, because only this evaluation can leave a clear association between the muscles and joints, thus, a comprehensive treatment of the muscle should be prescribed and a localized treatment. Being the second Weyneck (2005), where he says that the decay happens in postural and disability ages 12 to 15 years old, which happens all the growth spurt.

CONCLUSION

This literature review on Mouth Breathing and TMD leads to the conclusion that there is great importance of the knowledge and treatment as soon as possible of these oral health problems, not only in athletes but in all kinds of people improving their quality of life. Always remembering the importance of a multidisciplinary diagnosis because of the great difficulty in assessing the causes and consequences of these disorders may actually counteract its evils so effectively.

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ABSTRACT

Today it is known that the cares with Moouth Health are fundamental for the human being and indifferent of that she should be treated with a same importance when it is sports like this that study comes to look at some factors are sober a Moouth Health to disturb of they can that a lot of and the athletes' sporting acting. Like this for the vast amount of available bibliographical information that research is looked at two types of very common problems and of great relevance for the sport if treating of the Moouth Health. Factors those that are a Moouth Breathing and a Temporomandibular Dysfunction (TMD). Those Factors common of a lot of healthy and they need great attention and without you doubt an effective treatment and the more possible early could avoid like this more complications records hereafter. That of he/she tells a Buccal Breathing can bring vary breathing complications to the individual. They speak about the posture of problems caused by sober TMD could cause irreversible damages to the human being. Speak that a Moouth Breathing can decrease in a significant way the physical acting. It is like this important that linked professionals to the Sport and a health have knowledge of those factors.

KEY-WORD: Moouth Breathing, Temporomandibula Dysfunction, Physical Acting,

LA RESPIRATION ET LA DYSFONCTION DTM N ET SES RELATIONS PERFORMANCES PHYSIQUES.

SOMMAIRE

Aujourd'hui, il est connu que les soins de santé bucco-dentaire sont fondamentales pour les êtres humains et indifférent qu'elle devrait être traitée avec la même importance quand il s'agit de sport donc cette étude est de faire attention à certains facteurs sur la santé bucco-dentaire qui peut entraver la performance athlétique et très des athlètes. Ainsi, la vaste quantité d'informations bibliographiques disponibles pour cette recherche était attentif de deux types de très commun et d'une grande pertinence pour le sport quand il s'agit de la santé buccodentaire. Ces facteurs sont la respiration bouche et dysfonctionnement de l'articulation temporo-mandibulaire (DTM). Ces facteurs sont très fréquents et nécessitent beaucoup de soin et sans aucun doute un traitement efficace dès que possible et peut ainsi éviter des complications plus graves plus tard. Respiration par la bouche peut apporter diverses complications respiratoires à l'individu. Des problèmes de posture causé par DTM peuvent causer des dommages irréversibles pour les êtres humains. Respiration par la bouche peut également réduire considérablement les performances physiques. Ces données donnent un aperçu de ce que ces problèmes dentaires peuvent affecter l'athlète. Il est donc important que les professionnels concernés par les sports et la santé sont conscients de ces facteurs peuvent orienter et mieux la recherche du meilleur résultat.

MOTS-CLÉS: respiration par la bouche, la dysfonction temporo-mandibulaire, la performance physique

LA RESPIRACIÓN Y LA DISFUNCIÓN DE LA ATM Y SU RELACIÓN CON RENDIMIENTO FÍSICO.

RESUMEN

Hoy en día se sabe que el cuidado de la salud bucal son fundamentales para los seres humanos e indiferentes que deben ser tratados con la misma importancia cuando se trata de deportes por lo que este estudio es el de prestar atención a algunos factores sobre la salud oral que pueden dificultar el rendimiento atlético y muy de los atletas. Así que la gran cantidad de información bibliográfica disponible para esta investigación fue atento dos tipos de muy comunes y de gran relevancia para el deporte cuando se trata de la salud bucal. Estos factores son la respiración bucal y Disfunción de la Articulación Temporomandibular (DTM). Estos factores son muy comunes y necesitan mucho cuidado y sin lugar a dudas un tratamiento eficaz lo antes posible y puede prevenir complicaciones más serias después. La respiración bucal puede traer diversas

complicaciones respiratorias de la persona. Los problemas de postura causados por DTM puede causar daños irreversibles a los seres humanos. La respiración bucal también puede disminuir significativamente el rendimiento físico. Estos datos dan una vista previa de lo que estos problemas dentales pueden afectar a los atletas. Por eso es importante que los profesionales implicados con el deporte y la salud son conscientes de estos factores puede guiar y hacer un mejor buscando el mejor resultado.

PALABRAS CLAVE: respiración por la boca, disfunción temporomandibular, el rendimiento físico.

RESPIRAÇÃO BUCAL E DISFUNÇÃO DA ATM E SUA RELAÇÃO COM O DESEMPENHO FÍSICO.

RESUMO

Hoje é sabido que cuidados com saúde bucal são fundamentais para o ser humano e indiferente disso ela deve ser tratada com a mesma importância quando se trata de esportes assim esse estudo vem atentar para alguns fatores sobre a Saúde Bucal que podem atrapalhar e muito o desempenho esportivo de atletas. Assim pela vasta quantidade de informações bibliográficas disponíveis essa pesquisa se atenta para dois tipos de problemas muito comuns e de grande relevância para o esporte se tratando da Saúde Bucal. Fatores esses que são a Respiração Bucal e a Disfunção da Articulação Temporomandibular (DTM). Esses Fatores são muito comuns e precisam de grande atenção e sem duvidas um tratamento eficaz e o mais cedo possível podendo evitar assim complicações mais graves futuramente. A Respiração Bucal pode trazer varias complicações respiratórias ao indivíduo. Problemas posturais causados pela DTM podendo causar danos irreversíveis ao ser humano. A Respiração Bucal também pode diminuir de forma significativa o desempenho físico. Esses Dados dão uma previa do que esses problemas bucais podem afetar o atleta. Assim é importante que profissionais ligados ao Esporte e a saúde tenham conhecimento desses fatores podendo orientar e melhor proceder buscando o melhor resultado.

PALAVRAS CHAVES: Respiração Bucal, Disfunção Temporomandibula, Desempenho Físico.