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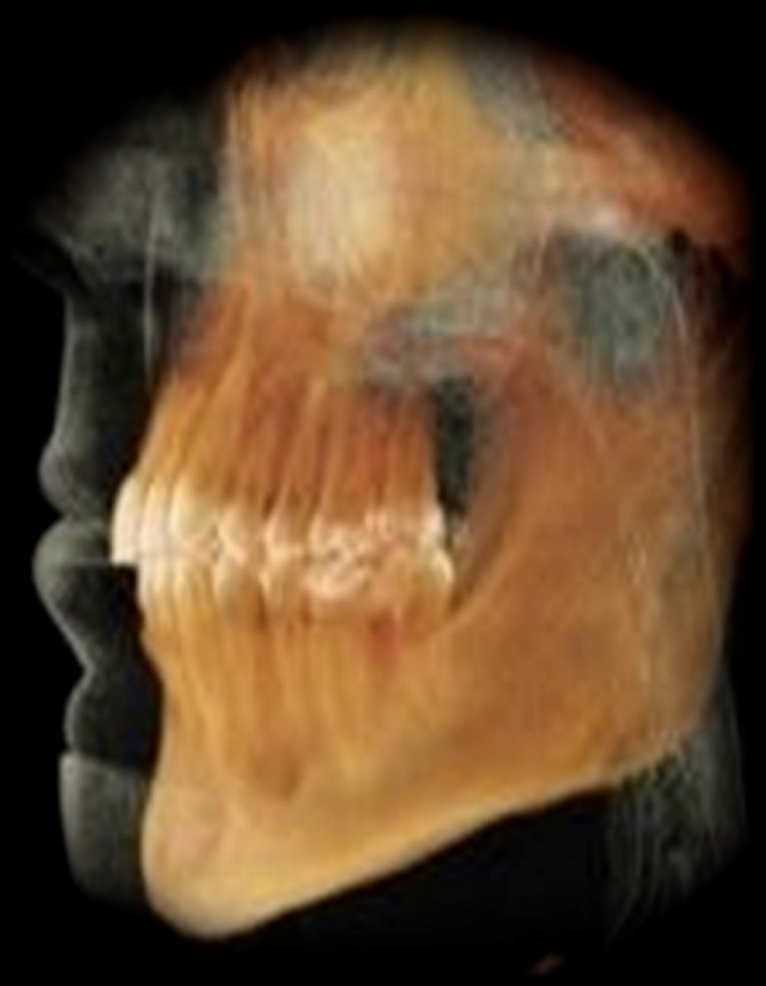

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Editorial

Dear Researcher,

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Summary

ORIGINAL ARTICLE

CASE REPORT

BRUXISM TREATMENT IN CHILDREN WITH SILICON OCCLUSAL BOARD: COMPARATIVE STUDY OF TWO CLINICAL CASES

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ABSTRACT

The changes that occurred daily in children contributed to the increase in cases of childhood bruxism. The objective is to report two cases of bruxism in children 11 years old and discuss the forms of treatment. Inclusion criteria were headache, myofascial pain and grinding of teeth nightly for more than 6 months. We used the questionnaire to the temporomandibular disorders diagnostic criteria (axis I and II of the RDC / TMD), the Sleep Assessment Questionnaire (SAQ), which were applied before and after 60 days of use of the occlusal splints from silicone and Pain Calendar. The proposed treatment was the use of silicone in the jaw plates with complete coverage of the occlusal surfaces. After two months there has been verified that the absence of nocturnal grinding report indicating a decrease in the intensity of nocturnal bruxism and improvement in reporting pain in muscles of the face and headaches. Treatment with the silicone in occlusal splints, used by children, were efficient to the bruxism control. There is need for a correct diagnosis and treatment plan as well as a multidisciplinary monitoring due to multifactorial etiology of bruxism.

KEYWORDS: Sleep bruxism, tension-type headache, child, occlusal splints

1. INTRODUCTION

Bruxism is a condition characterized as a pathological activity of the stomatognathic system, which involves milling (grinding) and clenching of the teeth during mandibular parafunctional movements can happen during the day or night (day or night bruxism), usually performed in order unconscious[1].

The sounds and movements made during the nocturnal bruxism usually are not reproducible for an agreed individual, probably by the absence of protective reflex of the masticatory system overnight, allowing the action of extremely harmful forces to the stomatognathic system. The daytime bruxism, however, can occur in conjunction with other parafunctional habits, such as excessive use of chewing gum, biting pencil or pen, nail biting, and biting his lips. Such habits may occur at an early age, persist lifelong occurring with greater intensity during periods of crisis in association with an increase in muscle tone and stress. However, the most frequent nocturnal bruxism is, varies with each individual and related to physical or emotional stress[2].

Bruxism in children is common, due to the immaturity of the masticatory neuromuscular because it relates to the growth and development of jaws and teeth, because their upper teeth and lower occlude not correct and comfortably when they are erupting[2].

The prevalence of bruxism in children and adolescents, ranging from 13.5% to 33%, with females more likely to temporomandibular disorders (TMD) including bruxism, at all ages compared to males[3].

The TMD signs and symptoms increase with advancing age, so the diagnosis and early treatment of bruxism is important to prevent its progression, preserving the permanent dentition and the stomatognathic system. Although, the etiology of bruxism not be fully elucidated. The favorable conditions are: systemic (affecting the entire body or just body system); psychosocial (interaction of psychological and social variables); neurophysiological (cellular processes and metabolic neuromuscular system); structural (occlusion, musculoskeletal, joint and developmental abnormalities); heredity and physical and emotional stress (aggression, anxiety and hyperactivity. Taken together its condition demonstrating that its multifactorial etiology occurs due to the interaction of various factors that can trigger bruxism[4].

In addition, children with bruxism during sleep have a higher index of excitement (micro arousals) and an increased incidence of attention and behavioral problems[5]. The micro awakenings are short-lived, with pe-

riods of nocturnal bruxism, lasting around 3-15 seconds with the cortical activation associated with an increase in the activity of the sympathetic nervous system and muscle activity and serious bodily movements, including involuntary movements of the legs (restless legs syndrome), increased heart rate and breathing disorders during sleep[4].

Bruxism has several signs and symptoms of which the main findings are: wear of tooth surfaces (mainly upper canine and molars); orofacial pain; dental hypersensitivity due to dental wear; pain and fatigue of facial muscles and joints; headaches (especially morning); mandibular dislocation; damage to teeth enamel leading to dentin or pulp exposure may result in pulpitis and/ or pulp necrosis. In addition, popping appearance or clicks in the temporomandibular joint (TMJ) are related, as well as lacerations in the language, jugal damage to the mucosa, temporomandibular disorders, dental fractures and/ or restoration. The muscle hypertrophy; tooth mobility causing injuries in the periodontal ligament; hypercementosis; loss of vertical dimension (because of tooth wear); limitation of mouth opening and/ or lockjaw, and behavioral changes such as hyperactivity, cognitive problems and daytime behavior – with aggressive behavior, lack of focus and poor school performance[1,3].

The child may experiences: respiratory disorders and sleep disturbances related to bruxism, such as snoring, mouth breathing; wheezing and choking during sleep, increased levels of exhaled carbon dioxide, sleep problems and restless sleep (restless leg syndrome). A small percentage of bruxists exhibits excessive daytime sleepiness, nocturnal enuresis (bed-wetting), excessive sweating during sleep, hormonal and metabolic problems, failure to thrive (weight loss or weight gain) and night drool[3].

A number of different therapies, either alone or combined, have been suggested in the literature for treating bruxism, among them we can mention local, systemic, and additional psychological treatments.

Local treatments are restorative treatments, orthodontic treatment, occlusal adjustment and bite plates. Systemic medication and medical treatment are others possibilities to the systemic treatments. There are also psychological treatments with the advice and / or psychotherapy for emotional nature of disorders. The proposed complementary treatments are physical therapy and acupuncture.

Nowadays the most common treatment for bruxism is the use of occlusal splint acrylic or silicone by its reversible character, which is especially valuable in dentistry, not to change the processes of growth and development of jaws[2]. However, the use of an occlusal splint should be given at an early stage of therapy, because according Solberg *et al.* (1975)[6], the use of long-term occlusal splint does not cure nocturnal bruxism habit. Okeson (1987) also reported that following the plaque removal in patients with bruxism, nocturnal activity in electromyography of the masseter muscle increases to the level of pretreatment[7].

Recently, there has been the introduction of the occlusal splint with Vibratory Stimulation (VibOS) for the management of pain related to TMD. The vibration circuit activation threshold is 4 $kg.cm^{-2}$. This device has vibratory activation only during abnormal teeth clenching, founding that vibratory stimulation temporarily reduces chronic muscle pain by elevating muscular pain threshold, and invokes the opening reflections of the jaw and thus decrease the strength and/ or frequency of masticatory muscle activity, relieving the painful symptoms related to TMD after a period of 15 days[8].

Therefore, the dental professional must be careful to observe the dental and medical history before using any therapeutic measure, particularly because the etiology of bruxism may be multifactorial.

It describes two cases of bruxism in children of the same age and with different life stories in order to discuss the possible factors that could have triggered this parafunctional condition and verify the effectiveness of treatment with occlusal splint silicone front of soreness and the change in quality of sleep.

2. MATERIAL AND METHODS

This study was approved by the Ethics Committee of the Faculty Inga - CAAE 47352815.6.0000.5220, held between June and August 2015.

They attended the clinic of pediatric dentistry Inga Faculty, two children of both genders, aged 11 years, presenting chief complaint of headache, myofascial pain, nocturnal gnashing of teeth, for at least one year. Then those responsible, made reading the Informed Consent and Informed and after all doubts are resolved signed the document.

When performing anamnesis, the absence of systemic, joint and respiratory diseases.

He held the extra clinical and intra oral, by a single examiner.

The extra oral examination includes the application of Axis I RDC / TMD (question 1-7), containing:

1. palpation in the TMJ region, in some muscles responsible for chewing as masseter and temporal, and other neck muscles and cervical powders, to check for muscle pain and/ or joint or not.
2. Measurement of the maximum aperture of voluntary mouth free of pain and with aid being with or without pain (vertical range of motion);
3. It was the pattern of opening and closing to find clicks and / or crackling in TMJ and deviations or deflections in the opening and/ or closing,

4. Auscultation (stethoscope) to observe unusual sounds like popping and crackling in the TMJ,
5. Tours and left and right side protrusive motion, to check if their presence or absence of muscle pain and/ or articulate.

All of these tests aimed to lead to diagnose TMD of muscular origin or joint.

In intra-oral exam if found that both had already been submitted to the dental clinical treatment and had no active carious lesions, absence of periodontal disease or occlusal problem, but also, there were no wear of dental facets of canines and molars, despite being one of the most common indicators of bruxism in children. On examination showed mixed dentition, with the presence of second deciduous molars. There was no indication for orthodontic treatment.

In addition, patients with the help of those responsible answered a questionnaire to research diagnostic criteria for temporomandibular disorders RDC/ TMD, containing demographic, socioeconomic, behavioral, psychosocial, and sleep-related.

The application of Axis II of the RDC/ TMD was used to assess behavioral and psychosocial factors relevant to the treatment of patients with TMD. The shaft includes a scale graduated chronic pain, depression measurements and number of non-specific physical symptoms as well as a limitation evaluation of jaw movement ability[9].

Sleep Assessment Questionnaire (SAQ): presents 19 questions that allow answers with scores 0-4, which together classifies the individual for the presence or absence of sleep disorder. The chosen cut-off point was 16, being the highest sensitivity (0.73) and specificity (0.80). Therefore, individuals with a total score up to 16 points are classified "without sleep disorder" and above that "with sleep disorder" [10].

The aim of this study was to evaluate the signs and symptoms before and after the use of occlusal silicone plate in two children with bruxism in a short-term study (2 months). A silicone-based material chosen to protect the primary teeth, covering the occlusal surfaces of all teeth and for being a flexible material so as not to impede the mandibular growth. Furthermore, the thickness (3 mm) is sufficient to prevent drilling and increase the impact resistance.

3. RESULTS

Case 1: A male patient, 11 years old, brought to the pediatric dentistry clinic Faculty Ingá School by his mother, who reported that his son grinds his teeth at night, which reported recurrent facial pain in the morning, along 6 years. Such episodes began after the separation from parents when he was just three years old. No previous treatment for bruxism was performed. He observed their behavior and found that it is a very emotional child, because guilt is the things that happen and that is far-mind worried about everything.

Figure 1. Maxillary arch.

Figure 2. Lower dental árcade.

Figure 3. Silicone occlusal plate in the lower arch.

Case 2: Female patient, 11 years old, was brought to the pediatric dentistry clinic Faculty Ingá by his mother, who revealed that her daughter, grinds his teeth at night, and reported recurrent facial pain in the morning, the over 2 years. By observing their behavior it was found that this is an extremely worried child. They had sought medical help for treatment of headaches, however without success.

Figure 4. Maxillary arch.

Figure 5. Lower dental árcade.

Figure 6. Silicone occlusal plate in the lower arch.

The treatment plan of the patient after the diagnosis of nocturnal bruxism was the installation of a silicon plate with complete coverage of the occlusal surfaces to use in the mandible. To create the silicon plate held on the lower arch molding with Hydrogum alginate, for preparation of plaster models. The silicon film used consists of polyvinyl chloride in a thickness of 3 mm. The plates were fabricated by vacuum laminator, a manual press, which the sheet heated and sucked through the lower model. After making the board was necessary to make adjustments along the gingival margin to prevent tissue injuries.

Case 1 patient, with premolars erupt, it created a space on the board to allow normal eruption.

In both cases, instructed the patients to use the card every day, removing it only for cleaning and for meals, emphasizing the importance of nighttime use, for 2 months. Around this period, fortnightly adjustments were made and when necessary, the plates were modified and rebuilt to allow for proper bone growth and eruption of permanent teeth.

In order to study the pattern and intensity of the signs and symptoms of bruxism, was distributed to patients a timetable for playful note of soreness for two months containing the day, the location and intensity of pain (rated on a scale 5 degrees: no pain, mild pain, moderate pain, severe pain and maximal pain).

The signs and symptoms prior to treatment with the occlusal silicone plate:

Case 1:

During palpation examination, the patient reported severe pain in the muscles in the anterior temporal beam and the masseter muscle motor end plate from both sides. There was no crackles and pops during opening and closing movements. In the extension of the vertical movement, the patient experienced pain in the TMJ and the masseter muscle (pain in the front of the ear) on both sides; the maximum mouth opening, with or without assistance. Also demonstrated muscle pain, right lateral excursion. Reported pain in the left masseter region and left lateral excursion, pain in masseter region right. Already in the sleep questionnaire, the patient reported no trouble sleeping, but had a restless sleep or disturbed for a long move his legs and arms during sleep, although not snore during sleep, the patient's mother reported that he felt difficulty breathe at night because it is mouth breathing. According to the answers of Annex B - 20 of the RDC/ TMD questionnaire.

Case 2:

During palpation examination, the patient reported severe pain in the temporal muscles in the previous bundle and the endplate of the masseter muscle of both sides, showed the presence of fine crackles in the TMJ right during opening and closing movements, indicating the beginning of the previous disk displacement Right. Vertical range of motion, the patient developed pain in the right masseter and TMJ pain (pain in the front of the ear) on both sides, the maximum mouth opening without aid and assistance, but did not show muscle and joint pain in movements lateral excursion right and left lateral excursion. Already in the sleep questionnaire, the patient reported no trouble sleeping, but sometimes presents an agitated or disturbed sleep a move his legs and arms during sleep. Although sometimes snore during sleep, the mother of the patient reported that it had difficulty breathing during the night because it is oral breather. According to the answers of Annex B - 20 of the RDC/

TMD questionnaire.

For the scoring protocol for graduation from chronic pain, both patients had grade II: high pain intensity, pain intensity feature> 50, and less than 3 inability of points.

For the scores of items in Annex B-20 scale, the results were nil for depression measures and the number of non-specific physical symptoms (including pain items) and (excluding pain of items) the results are less than the reference value scale, both for patients not suffering from depression and non-specific physical symptoms.

For Sleep Evaluation Questionnaire (SAQ) the two patients had "sleep disorder" because they have cut point above the 16, being the highest sensitivity (0.73) and specificity (0.80). However the case of the first patient had higher sleep disorder that the patient GS B, with respectively 48 and 29.

The signs and symptoms after treatment with the silicone occlusal plate:

Case 1:

After daily use and full board for 50 days, there was (pain calendar) a great improvement of the headache by decreasing the frequency and intensity of pain (Figure 7).The disappearance of the sounds of grinding teeth, reported by the mother, indicating elimination or reduction in the intensity of nocturnal bruxism. However, there was a necessity to change the occlusal splint, due to attrition.

According to the notes in the calendar, still reported pain in the masseter muscle, though at a lower intensity to that of when he was not in treatment (Figure 7).

During palpation, in the exams repeated after treatment, the sensitivity in the masseter and temporalis muscle decreased.

According to the Sleep Assessment Questionnaire (SAQ), observed improvements in breathing during sleep.

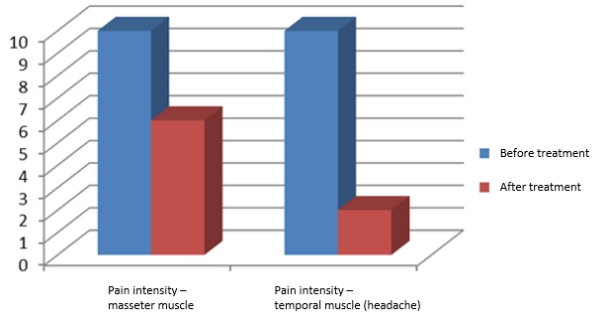

Figure 7. Pain intensity reported by Case 1, before and after the use of occlusal splint.

Case 2:

After the full journal and use of the plate for 65 days, a correction of the start offset of the previous drive with reduction which it had prior to treatment, which points to a possible regeneration of articular tissues. Therefore, there was no fine crackle in the right TMJ during opening and closing movements.

The disappearance of grinding sounds of teeth, reported by parents, indicates a decrease in the intensity of nocturnal bruxism.

According to the notes in the calendar, there were significant improvements regarding pain in masseter muscle reducing pain intensity and frequency (Figure 8).

Despite the frequency of headache have decrease the intensity slightly improved (Figure 8), particularly in the morning, therefore suspended the constant use of the card, using it only to sleep. These results were noted in pain calendar, for about 2 month's use of the silicon plate.

During palpation, exams were repeated after treatment, the sensitivity in the masseter and temporalis muscle decreased.

During the treatment was not observed improvements in sleep disorder, according to the Sleep Assessment Questionnaire (SAQ).

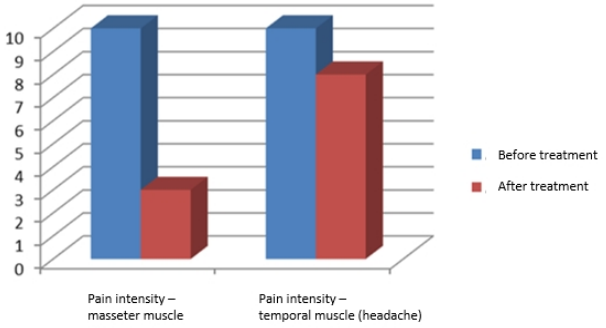

Figure 8. Pain intensity reported by Case 2, before and after the use of occlusal splint.

The results of this study indicate that despite the relatively short evaluation period; the night plate is effective to control bruxism in children but used wisely, only in moments when the masticatory system adaptive capacity is exceeded.

Not much information in the literature regarding the efficacy of long-term treatment for the treatment of bruxism. It is found that this habit is not completely eliminated, but kept under control, although it can be eradicated in very young children with maturity and tooth eruption[2].

4. DISCUSSION

Bruxism as well as the TMJ, are increasingly recurrent in children and adolescents. Thus, early diagnosis and appropriate intervention are vital to reduce and prevent the signs and symptoms of bruxism and temporomandibular dysfunction preventing the progression and subsequent consequences, such as damage to the stomatognathic system, the impact on academic performance, chronic pain or headaches, systemic diseases related to

mandibular growth and among others[11].

Various therapies have been used such as single or combined therapy for the treatment of bruxism.

In the present study it was not used the proposed treatment with restoration of teeth because they did not wear that compromised the vertical dimension or aesthetics or function.

However according to Gupta (2010) of the proposed local treatment may be the restoration of worn teeth using composite resin direct hybrids that allow a better reproduction of the areas that receive the normal occlusal load of returning the vertical dimension lost by wear dental[1]. Ahmad (1986) and Cash (1988) point out that the restorative procedures can be performed in specific cases for recovery of the vertical dimension[12].

In the present study the reports of headaches decreased and mouth breathing underwent significant improvements with the use of occlusal silicone plate in the short term (2 months). Agreeing with orthodontic treatment proposed by Carra (2013) for intervention in bruxism was to use the short term, of a MAD (Mandibular Advancement Device) which indicated a reduction in sleep bruxism, snoring, and reports headache. However, interactions between sleep bruxism, mouth breathing, and headaches have not been well elucidated, and its long-term effectiveness[11].

According to Ahmad (1986) and Carvalho (2003) occlusal adjustment is performed whenever there is occlusal interference that may cause damage to the TMJ, with the removal of premature contacts that interfere with centric occlusion and centric relation. The aim is to improve the occlusion and promote the reduction of premature contacts to prevent any parafunctional eccentric movements of the jaw. However, the occlusal adjustment is an irreversible[12] therapy and second Cash (1988) because of irreversibility should be carefully indicated[13]. According to Attanasio (1991), the adjustment is indicated only in the obvious presence of interference during mandibular motion, and in children aged above three years old[13]. Unlike this proposed therapy, in this study there was no occlusal adjustment, due to the need to preserve tooth structure.

There systemic treatments with the use of medications and medical treatments (device for the chin therapy, physical therapy and surgery)[14]. Some drugs (antidepressants, benzodiazepines, skeletal muscle relaxants and analgesics non-opioid) may be useful for a short period, particularly when there is pain secondary[14]. Gupta (2010)[1] reported that the treatment with clonazepam (benzodiazepines) significantly improved not only bruxism, but also improves the quality of sleep without changes in mood, psychophysiological measures performance and normal waking, suggesting good tolerability of the drug. Systemic medications have not been effective to permanently eliminate the sleep bruxism and is used only in cases of situational anxiety short term. There is a risk in the pharmacological therapy of addiction, but his statement is in cases where the pain is severe and it becomes necessary immediate action[4]. However, it is contraindicated for infant use.

In accordance with the studies of the psychological aspects, the present study demonstrated that there is a need for psychotherapeutic treatment for improvement in the context of anxiety and guilt. According to study by Restrepo (2001), 33 children aged 3-6 years, there are various psychological techniques have been effective in reducing the signs and symptoms of bruxism[15]. According to Funch and Gale (1980), the state of bruxism is correlated with psychological factors, suggesting that the kind of life and the behaviors and habits of the patient exerts great influence on the frequency, duration and severity of the condition[16].

According Lobbezoo & Naeije (2001), stress level and personality type were included in the etiology of bruxism for many years. However, the exact contribution of psychological factors remains debatable[16]. A study by Antonio (2006) has shown that people with bruxism generally exhibit emotional imbalance and tend to develop psychosomatic diseases[17]. These results were confirmed by Kampe (1997) and other, which also showed the presence of a higher level of anxiety in a group of people with bruxism[16]. Within psychotherapy there is counseling, self-suggestion, hypnosis, relaxation exercises and biofeedback[12]. Cash (1988) report that the advice can lead to a decrease in voltage by an increase of self-awareness, which may result in a greater voluntary control which in turn leads to a decline of dental-functions[12].

The proposed complementary treatments are physical therapy, acupuncture, the sleep hygiene and biofeedback[2]. In physical therapy, there are a number of treatments for the management of the signs and symptoms of TMD, including the electrical stimulation of high blood pressure, nerve stimulation transcutaneous electrical, laser therapy and massage therapy. In the study of Gomes (2014), there was the use of massage therapy with maneuvers in masseter and temporal muscles, but with the combination of an occlusal splint, with reduced pain and improvement in relation to the mandibular range of motion and lateral excursion on both sides of[18]. Consistent with the literature, we found the need for multidisciplinary team with the participation of physiotherapy.

In the study of Öz *et al.* (2010), there was the use of low intensity and occlusal splint laser and complete ram that both interventions were effective in increasing the maximum aperture active mouth, with no statistically significant difference between the two techniques[19] in contrast, in this study there was no significant change in the measurement of maximal mouth opening.

A number of physical therapy techniques have been indicated for the treatment of myofascial pain and dysfunction syndrome, such as massage therapy of deep tissue, muscle stretch/ relaxation, transcutaneous electrical nerve stimulation, injections trigger point and using occlusal splints decompression or myorelaxant plates[18]. Gomes research (2014) treated patients occlusal decompression boards showed decreases in subjective pain and pain on pressure on temporal, masseter and trapezius muscles, as well as greater opening of the mouth after treatment[18].

Acupuncture, considered as an effective alternative therapy for most clinical conditions involving chronic pain. The most common condition treated with acupuncture are the headaches, with positive results in relation to migraine, low back pain and temporomandibular dysfunction. According study Barrero (2012), acupuncture may have beneficial effects on PDS signs and symptoms in the short term[20]. It is considered the possibility of treating acupuncture to the reported cases, but it is noteworthy that the treatment of children must be the less invasive possible.

However, the most common treatment for bruxism, in dentistry is the use of an occlusal splint for its reversible character, which is especially valuable in dentistry, not to change the processes of growth and development of the jaws[2]. However, use of an occlusal splint should be given at an early stage of therapy, because according Solberg *et al.* (1975)[6], the use of long-term occlusal splint does not cure nocturnal bruxism habit. Okeson (1987) also reported that following the plaque removal in patients with bruxism, nocturnal activity in electromyography of the masseter muscle increases to the level of pretreatment[7]. Among the various types of recommended cards, the best known is the plate Michigan, constructed with colorless acrylic resin, usually for the upper arch and covering the occlusal surfaces of all teeth. With the reorganization of neuromuscular activity, reducing the hyperactivity of the muscles, and the restoration of the balanced muscle function. In this study was used by two months an occlusal plate like Michigan, however, made of silicone for the lower arch, showing good results.

According to Jones (1993) in which report the successful relief of headache for a period of 22 months follow-up in a girl five years after the use of an occlusal splint[21]. The neuromuscular balance achieved with an operating system may be responsible for relaxation of temporal muscles, leading to the absence of headache[3].

Agreeing with what was reported in the current job with Case 1 patient, male, 11 years old, where there was improvement in headache with the use of occlusal silicone plate. Noting that the use of silicone occlusal splints was that there was an acceptance for use by children, to be more comfortable and not to change the processes of growth of the jaw and or hinder the tooth eruption.

The silicon plate can be used and presents effects in relieving pain by absorbing bite force, and help prevent future damage to the teeth as a continuous abrasion, delayed eruption and/ or impaction of permanent teeth and malformation of dentin and enamel due to the trauma caused by teeth grinding also helps in changing behavior of patients with hyperactivity, poor school performance and difficult temperament, which have been reported in children with bruxism[3].

5. CONCLUSION

As a reversible treatment method, the occlusal silicone plate proved to be effective in the control of bruxism can be used by children.

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FACETS CERAMIC COMBINING AESTHETICS AND DENTAL GINGIVAL

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ABSTRACT

Is suggested the use of ceramic veneers for teeth that have changed the shape and color. The great advantage of this aesthetic restoration are the optical properties, chemical durability and less aggressive preparation compared to the other techniques. This paper reports the case of a patient dissatisfied with her smile, rehabilitated associating periodontal aesthetic treatment with increased clinical and dental crown through indirect facets of lithium disilicate.

KEYWORDS: Dental porcelain, esthetics, dental, ceramics.

1. INTRODUCTION

Increased social demand for cosmetic dental fosters research in the dental field, for the development and improvement of restorative materials. Among these, those ceramics exhibit various advantageous characteristics before other materials, such as adherence to tooth structure, high strength after cementing, longevity, excellent surface smoothness, low accumulation of plaque, color stability and optical properties similar to dental enamel[1,.2].

The smile should be harmonious, with balance between form, color of the dental element and good proportion between lip and gum. When smiling, gingival exposure should range from 1 mm to 3 mm. This little apparent gingival band ensures a youthful appearance, however, when it extrapolates measures there is a visual imbalance and then characterized the gummy smile[3].

The presence of small deviations from dental and / or gingival, a certain smile, if not properly diagnosed and treated, condemned compromise the function and balance of the whole, critical to the improvement of self-image patients. One cannot fail to understand that the success of any treatment and / or aesthetic rehabilitation depends on the existence of harmony between the components of the oral and facial region. Also, when achieved harmony between these components, it is imperative still seek ideal relationship between dental and periodontal parameters[4].

This article reports a clinical case, which shows the correlation between the red and white aesthetics to achieve the best result of the aesthetic transformation of a smile.

2. CASE REPORT

Patient AB, 38, female, admitted to the clinic Inga Faculty - Maringa - PR, unsatisfied with their smile to the disability of the shape of the teeth, staining their composite restorations and gingival exposure when smiling (Figure 1).

Figure 1. Smile aspect observe the dental and gingival disharmony

Also presented longing for getting teeth look more natural. After history taking, clinical examination, analyzed the face, smile, gingival contour and dental characteristics. We performed the initial radiographs and clinical photographs. Faced with this protocol was drawn up a treatment plan; proposing, periodontal surgery to correct the gummy smile and fabricating porcelain laminates.

At the opening session, we performed the gingivoplasty (Figure 2). There was the need 1mm removal of alveolar crest using a Fedi micro-chisel, leaving the bone crest at a distance of 2 mm from the cementoenamel junction. The repositioning of the flap through internal vertical quilter type suture technique. After 60 days, bleaching technique was performed, in which is used a bleaching agent based on hydrogen peroxide, at a concentration of 37%, and this gel applied once only, for a period of 45 minutes, in two sessions clinical with an interval of 7 days between the first and second[5,6].

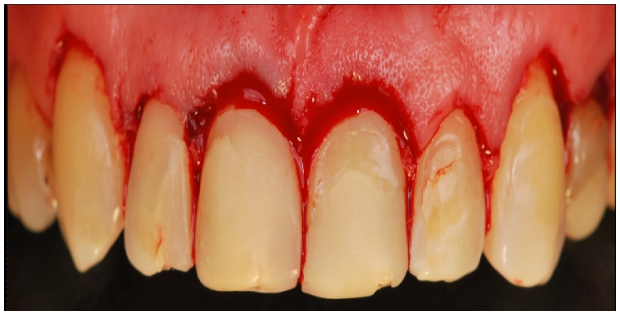

Figure 2. Crown increase being done.

Following bleaching, after a period of 14 days, the patient was molded with silicone by condensation Need (Dentsply), for making a plaster model which was conducted waxing diagnosis of dental elements 11, 12, 21 and 22. Then it was held guides to preparation and restorative guide. The preparation technique for indirect facet used was wearing the old restorations with diamond points in 2135 (KG Sorensen), and checking with wear guides at all times in preparation to measure the spaces for laminates. Later finishing was done at low speed with the cutters 2135 ff (KG Sorensen) and sanding discs for finishing (Figure 3).

Figure 3. Finalizing dental preparations note that there were a lot of composites on vital teeth.

The gingival terms were highlighted by receding gums wired Ultrapack # 00 (Ultradent). For molding was used the technique of double molding, initiated with the addition curing silicone heavy and then the lighter the material used was Virtual addition of silicon (Ivoclar Vivadent) and the antagonist was molded with the same material. Molds sent to the laboratory accompanying their photo of preparation and marking of laminated color (A1). Before dismissing the patient were carried out with the temporary bisacrylic resin Proptemp 4 (3mespe) using the guide for the Mockup. Obtained ceramic laminated lithium disilicate (E-max), the tests were made on the prepared teeth, were first proven tooth for tooth, after all teeth together and then tested with the test folder try-in color A1 and translucent light-curing of the resin cement Allcem Venner (FGM). We opted for the color A1 for cementation for further harmonization with the rest of the healthy elements.

The pieces, etched with 10% hydrofluoric acid Condac porcelain (FGM) for 20 seconds, were washed in phosphoric acid and in sequence applied rubbing microbush In order to remove residues left by the first acid. They were then washed and received a Prosil silane layer (FGM) anticipated evaporation and deposited universal adhesive Ambar (FGM) in laminates.

Dental elements, etched with 37% phosphoric acid Condac (FGM) for 15 seconds, followed by washing the same time. After drying with absorbent paper, points in order to keep the moist dentin shine. Following was passed adhesive and all teeth, resin cement placed in ceramic pieces, which have been adapted to the preparation at once. Removed the coarse cement excesses with dental floss, resin brush in the cervical and cleaning with gauze on the buccal aspect. After the end of the cleaning was done light curing for 5 seconds in the incisal portion and final removal of excess with explorer. Complemented is then curing the face of each tooth for 40 seconds. Finally removed the remaining excesses and made the occlusal adjustments (Figure 4).

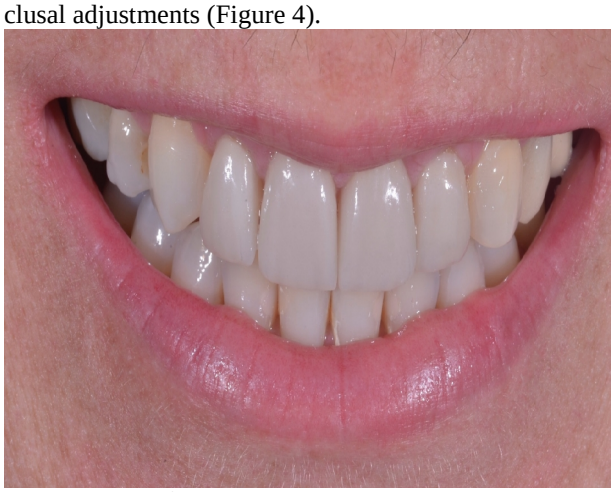

Figure 4. Aspect of the new smile.

3. DISCUSSION

Has been a growing number of cases, which show the aesthetic efficiency, and high longevity of ceramic restorations, making them the safest option in meeting the expectations of patients[7]. On the other hand, the disadvantages of this type of restoration include biological cost, possibility of sensitivity dentin, irreversibility of preparation, hard repair (in case of fracture), and complexity in the execution of clinical and laboratory steps[8].

The ceramic used in the clinical case IPS E.max (Ivoclar Vivadent) is different from conventional ceramics, are more resistant to fracture and wear[9]. This ceramic stood out by having a great homogeneity, reduced porosity and optical characteristics similar to natural teeth. However, some authors have indicated that the main reason for failure of ceramic restorations is the fracture, which is usually associated with inadequate tile thickness, the shape of the preparation, the occlusion of the patient, cementing agents and internal defects of the ceramic[10].

However, the most common laboratory process used is different injected into a feldspathic ceramic which is held in a stratified manner can achieve greater translucency of the incisal edge[11]. The success of any aesthetic treatment depends on several factors: training and expertise on the ceramic characteristics to be used. To make a metal-free porcelain is used a conventional technique from 2.0 mm up to 0.2 mm without needs to wear the tooth enamel.

The gingivoplasty in association with ceramic restorations IPS system (E-max) are shown as an excellent choice in the aesthetic and functional rehabilitation of worn teeth, broken or conoides and gummy smile.

However, the gingivoplasty this contraindicated when the patient has heart disease or uncontrolled diabetes, flabby gum, shallow palate, poor plaque control, small amount of attached gingiva, pronounced external oblique line, use of corticosteroids or anticoagulants, with current acute infection, intraosseous purses and handbags with different depths[11.12].

4. CONCLUSION

Should not base the smile esthetics only on the dental elements, but the facial harmony. So a correct facial analysis (bipupilar plan, online media, dynamic lip and teeth), make a better diagnosis, thus improving the correct ratio of red and white aesthetics. Ceramic veneers are an excellent option for cases of chromatic and morphological changes as it mimics intrinsic characteristics of dental elements, ensuring beauty, durability and consequent excellence to the work carried out.

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SQUAMOUS PAPILLOMA: TREATMENT IN DENTISTRY

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ABSTRACT

The papilloma IN Infection Outbreak human virus (HPV) in oral cavity has been little investigated in relation one Infection In this virus in the genital area. It is an oral cavity FOR Considered Authors How many reservoir and source of virus infections Of this, the present work aims to address the HPV Treatment paragraph in the mouth through the hum case report where the patient had clinically oral lesions NAS regions of papillae not Fabric periodontal, Compatible with leukoplakia. Was performed at a biopsy and excisional with APOS Microscopic Analysis removal, the diagnosis was C / C (compatible) Papilloma.

KEYWORDS: Papillomavirus, HPV, human papilloma virus.

1. INTRODUCTION

The human papilloma virus (HPV) is a DNA virus, non-cultivable, belonging to the papilloma virus group, which is highly transmissible and has a considered tropism for epithelial and mucosal tissue, found often in the anogenital region, and the sexually transmitted disease (STD) common throughout the world, it is estimated that about five hundred thousand to one million people become infected by HPV in the world. In Brazil, there are between three and six million people infected with this virus[1,2,3.]

Cellular changes developed by this virus were studied initially in 1956 by cytologists Koss and Meisels, that termed mild, moderate or marked dysplasia. His most common clinical manifestations are common warts, characterized as injuries firm, circumscribed, elevated and rough surface and can be pedunculated or adhered to the tissue[2,3,4,5.]

In recent decades, has seen an increase in the number of infected with HPV, both men and women, in the genital region and year in the past 15 HPV was the major cause of cervical cancer. Due to the increased practice of oral sex, currently papilloma virus came to be found in the oral mucosa and has been associated with squamous cell carcinoma of the head and neck, particularly oropharyngeal carcinomas[6,7.]

More than 100 types of HPV have been identified, of which only 24 types were associated with oral lesions (HPV- 1, 2, 3, 4, 6, 7, 10, 11, 13, 16, 18, 30, 31, 32, 33, 35, 45, 52, 5, 57, 59, 69, 71, 73), which were identified and divided into two groups of high and low and receive this classification according to their propensity to cause cancer. Low risk are: (HPV – 3, 6, 11, 42,43, 44) are associated with benign warts. HPV's high risk are: (HPV- 16, 18, 31, 33, 34, 35, 39, 45, 46, 51, 52, 56, 58, 59, 66, 68e 70) are associated with dysplasia and invasive carcinomas. In oral cavity the most common subtypes of low risk are: (HPV - 11, 36 e 42), while the most common high-risk subtypes are: (HPV 16, 18 e 31). Given that HPV 6, 11, 16 e 18 are the most prevalent in Brazil in oral and genital lesions[3,8,9,10,11.]

Thus, the presence of these viruses have been found in various lesions of the oral and nasal cavity, paranasal sinuses, the conjunctiva, the bronchial mucosa in the esophagus, the urethra, the anogenital tract, the skin, infection occurs when the virus penetrates the host by a loss of tissue integrity, viral particles which have direct access to the basal layer. The transformation of epithelium and the development of related lesions such as squamous cell papilloma, verruca vulgaris and *Condyloma acuminatum*, seem to be closely related to cellular permittivity region of incubation, the type of infecting HPV and the host immune response[4,12.]

In the oral cavity, the tongue is the site of highest frequency of HPV injuries, we can also find on the palate, buccal mucosa, gums, lips, tonsils, uvula and floor of the mouth. The incubation period ranges from 2 to 8 weeks. The diagnosis of human papillomavirus in the oral mucosa is given by clinical examination, cytology, biopsy, immunohistochemical DNA hybridization, hybrid capture and PCR. A biopsy will only allow the histopathological study through which one can confirm and graduating injury, to identify the type of HPV is obtained only with PCR tests, in situ hybridization, hybrid capture[3,6,12.]

The treatment of oral papillomavirus is conservative, requiring the complete removal of the lesion. Margin of safety is not mandatory. Injuries not usually treated not change over time. Conservative surgical excision is a

good choice, and also indicated the destruction by CO_2 laser, the electrocautery and cryosurgery[13,14].

This study aims to report the diagnostic and treatment of possible squamous papillomas in a child by conservative surgical excision.

2. CASE REPORT

Patient 40 years of age, black race, male, resident in the northwest of the state of Paraná state, smoker, makes use of alcohol, use full upper and lower dentures, you attend a Dental Clinic of Faculty Inga, looking dental treatment, reporting present "wart" in regial the "mouth Heaven" this for a month without changing in size during the period when he noticed the injury. In the anamnesis the patient reported that her oral hygiene was good and his professional activity is Mason, but reported that the youth worked in rural area.

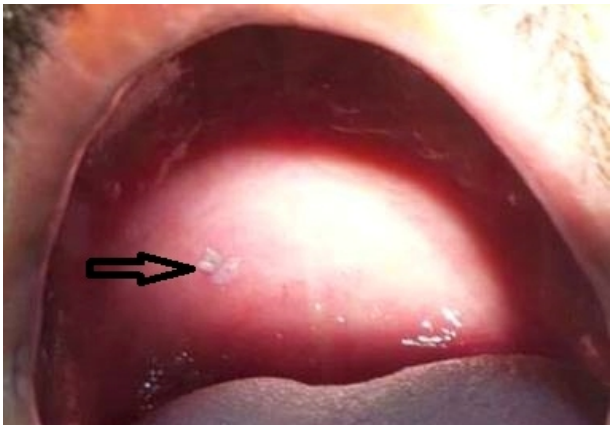

Figure 1. Injury in the region of the soft palate, one tissue growth in the form of papule with micro projections on its surface whitish and warty appearance.

Intraoral clinical examination it was found a lesion in the soft palate, there was a tissue growth in the form of papule with micro projections on its surface whitish and warty appearance with probable diagnosis of leukoplakia (Figure 1).

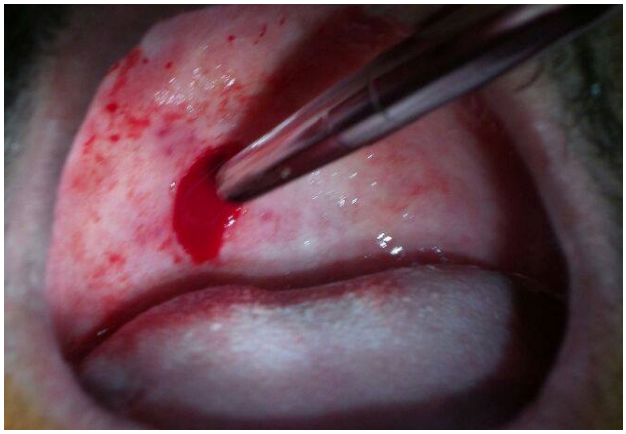

Figure 2. Lesion in the region of the soft palate, conservative surgical excision.

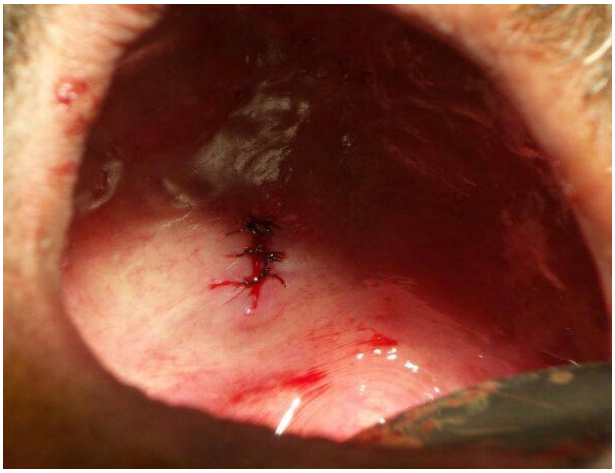

Figure 3. Suture pos conservative surgical excision.

The clinical diagnosis was of oral squamous papilloma or verruca vulgaris, probably from autoinoculation by previous injuries in the skin of the hands. Treatment for injury would be conservative surgical excision, mainly because the patient has developer profile to conventional surgical technique was used (Figure 2 and 3).

After radiographic and laboratory tests routine, surgical removal of the lesions with excisional biopsy and the biopsy fragment sent to the Pathology Laboratory of the Faculty Inga was held, which provided the report as C / C Papilloma (Figure 3).

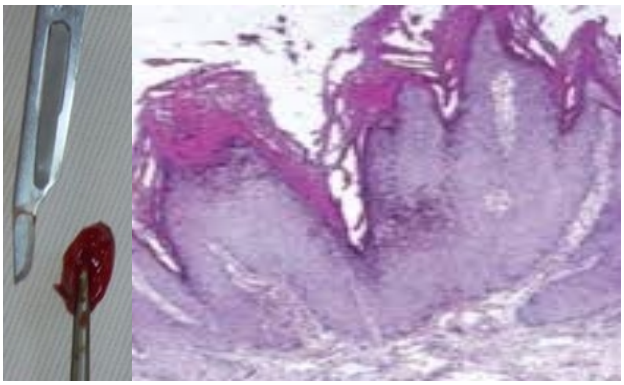

Figure 3. Tissue growth injury-shaped papule. hyperplastic epithelium stratified keratinized, with intense vacuolization and moderate hydropic projecting itself in the form of papule.

The patient returned for 7 days to removal points and evaluation of the healing process. The same was told to return within 1 month for new evaluation.

After 1 month of the surgical removal of the lesion was performed a reassessment which was observed the appearance of normal mucosal repair process (Figure 5), with absence of recurrence or painful symptoms.

Figure 5. One month after tumor removal and evaluation of the healing process.

Two months after reaching the end of all dental treatment a new assessment was performed and there was complete formation of the healing process (Figure 5).

Figure 6. Two months after tumor removal and evaluation of the healing process.

3. DISCUSSION

Valuing Papilloma lesion, reported in the clinical case due to the relationship of the human papillomavirus, is the virus most sexually transmitted and very important in the pathogenesis of cervical cancer, accounting for approximately 10% of all cases of cancer in women in the world[6]. The biopsy diagnosis and allow the dentist, warn and instruct the patient on the ratio of its oral lesion with cancer, and cause it to be investigated in people who have contact, especially women[1,2,3.]

Treatment modes such as surgical excision, electrocautery and laser vaporization by Design Guidelines Brazilian Medical Association and Federal Council of Medicine 12 Human Papillomavirus (HPV): diagnosis and treatment can quickly remove the warts, but these procedures can be painful, are destructive and recurrences are common, occurring in the case of laser therapy for between 9% and 72% of case[1,2.].

Being a sexually transmitted disease (STD), recommended to the assessment and treatment of sexual partners, condom use and clarification as to the oncogenic potential of the lesions. As there are not methods to eradicate the virus of the anogenital region and because of the potential for relapse, it is important medical follow-up after treatment[14.]

4. CONCLUSION

Clinical results obtained by the use of conventional surgical technique for removing squamous papillomas in 40-year-old patient was satisfactory. The technique has proven to be simple and safe. Moreover, patient discomfort is minimal and healing was rapid and effective. Despite being considered a traumatic technique proved to be feasible for the outpatient setting the dentist.

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ACTIVATOR ELASTIC OPEN IN KLAMMT TREATMENT OF BAD OCCLUSION CLASS II DIVISION 1

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ABSTRACT

The standard elastic Klammt activator device used for Class II division 1 with mandibular protrusion and retraction smooth jaw, with better clinical outcomes in mesofacial and brachyfacial standards. It is still used in Class I malocclusion, with class II characteristics, ie maxillary protrusion and mandibular retraction, but without severe dental crowding, this paper aims to present an alternative approach to orthodontic treatment of Class bad occlusions II. Through a report of clinical case.

KEYWORDS: Orthodontics, Class II, Klammt.

1. INTRODUCTION

The malocclusion Class II is one of the most common problems in orthodontic practice, regardless of the causes, either by maxillary protrusion, mandibular retraction or combination. The malocclusion Angle Class II is characterized by an anteroposterior dental discrepancy in relation to the molar position which may or may not be associated with skeletal changes[1,2,3].

Studies show that in most situations, the skeletal discrepancy of Class II is not self-corrects with growth, being necessary orthodontic treatment to correct the skeletal discrepancy between bone bases. Once you define the etiology and malocclusion features, you can select the most effective method of treatment[4,5].

There are several approaches to the treatment of Class II, a wide variety of fixed and removable functional apparatus has been described in the literature, many studies show that the removable functional devices are a good choice of orthodontic therapy for the treatment of skeletal dysfunction making treatment effective in patients who are found in skeletal development phase[4,6].

Although the elastic open activator device Klammt had been independently created, it was developed parallel to Bionator Balters. The fundamental difference between the two devices was the incorporation of handles, making it more elastic Klammt player making the most functional device[7,8,9].

Initially the Klammt machine was a device consisting of a modified inclined planes in the region of molars that played the role of construction bite system, which aims to correct the distoclusion by transmitting muscle stimulation to the teeth and supporting tissues, though the it was used only during the night[7,8].

Hans (1949) introduced a device called elastic modeler, of small size, which made it possible to use the device for longer periods of the day, which prevented the relapse of the improvements obtained in the evening. Finally, George Klammt in 1955 thought their very fragile devices and, based on that, drew a less elastic device, combining some of its elements with a cut activator in front, in order to make your toughest unit can this be used full time achieving thus a way to quickly change and function[7,8].

There are two types of open elastic activator, a type without acrylic projections interproximal spaces (guide surfaces), wherein the side and acrylic blocks are flat, lightly touching the posterior teeth, and others, acrylic, penetrates the interdental spaces the lingual surfaces of all teeth in the posterior segment[7,8].

In both types, acrylic extends over a small part of the adjunct gums. The sagittal mobility is higher in the first type. During treatment, the acrylic surface can be easily changed, if desired, by adding wear or self-curing acrylic[7,8,9].

The standard elastic activator apparatus consists of bilateral acrylic resin segments, upper and lower lip arches, an arch palatal type Coffin and guidewires to the upper and lower incisors. Both acrylic segments touch the palatal and lingual surfaces of the teeth of the maxilla and mandible and extend canine distal to the last molars. It is in the acrylic falling into the ends of the handles and springs, which must be adapted to the model in order to leave more space possible for the language, so that it does not have its committed functional space[11, 12].

Lip upper and lower arches out of acrylic between the canines and the first premolars. Follow distally to the middle third of the labial surface of the second premolars or deciduous molars, maintaining a minimum distance between wires and teeth. After forming a curve

handle, returning to the previous portion, lightly touching this battery without regard to the positioning of the teeth[11, 12].

It is documented the Klammt apparatus as a Supporting Role in Class II treatment procedure for the other side, but the labial arches should be constructed so as not to interfere with the eruption of teeth and should allow lateral and vertical growth expansion. The palatal arch originates in the region between first and second premolars or deciduous molars[11,12].

This arch rises steeply and is then bent at right angles to make an oval shape, which follows along the palatal mucosa, reaching the rearmost part of the tangent line to the distal surfaces of the first molars. Tucked at right angles again, down steep and is inserted into the acrylic on the opposite side between first and upper second premolars or deciduous molars. Promotes thus the union between the two segments acrylic[11,12].

It should be noted that the palatal arch should be as close as possible to the hard palate, maintaining, however, a minimum distance without touching it, thus avoiding cause mucosal lesions. Digital springs are placed very close to the lingual and palatal surfaces of the upper and lower incisors. In order to adjust them during treatment, it makes a compensatory curve just to get out of acrylic. Thus, front teeth, both upper and lower, are among the buccal arch and digital springs. The support of open elastic activator is on the palatal face of the upper and lower canines. If, in the absence of canines, the open elastic activator hurt the palatal mucosa, can put acrylic on the occlusal surface of molars and then remove it when the canines erupt[11,12].

The palatal bow is made with stainless steel wire of 1.2 mm in thickness, and all other device components wired 0.9mm. The device construction bite is obtained in the same way as for Balters Bionator, ie the edge position on board the incisors and the average matching lines if there is no premature loss of deciduous canines or crowding that changes the position of the midline[11,12].

This study aims to present an alternative approach to orthodontic treatment of malocclusion Class II. Through a report of clinical case, in which we used the elastic open activator device Klammt device which is an alternative treatment for malocclusion class II major clinical efficiency, easy installation and good acceptance by the patient.

2. CASE REPORT

Male pacient, 8 years and 7 months old, leukoderma, Brazilian, attended the clinic Orthodontics, Faculty Inga, Maringa, Parana, with the complaint that required the use of braces, whose main complaint was: "I am with crooked teeth ".

The first consultation was observed good oral health, mixed breathing and nail biting, class II division 1 mixed dentition (Figure 1). Thus it was asked to perform the same orthodontic documentation for a better assessment and planning of the case.

Figure 1. Initial Photo. Patient categorized as Class II, Division I.

Performed with documentation were observed in cephalometric analysis (Table 1), the following changes; the maxilla and mandible presented is well positioned relative to the skull base (SNA = 80°) and SNB (= 74º), the relation between the jaws is increased (ANB = 6º); convex profile (Line H = - 2 mm); the skeletal pattern is normal tending to horizontal, evidenced by the FMA = 22º angles, SNGoGn = 30º and SNGn = 67º; the upper incisors slightly proclined (1.NS = 110°) and normal lower.

Table 1. Cephalometric measures obtained before the beginning of orthodontic treatment.

SNA	**80^{O}**
SNB	74^{O}
CoGn	100 mm
CoA	94 mm
ANB	6^{O}
H line	-2 mm
FMA	22^{O}
SNGoGn	30^{O}
SNGn	67^{O}
1 NS	110^{O}

Figure 2. Teleradiography, hand and wrist radiographs and initial panoramic radiograph of the face.

For McNamara analysis, the patient had a small jaw (CoGn = 100 mm) compared to the size of the jaw (CoA = 94 mm) as the mandibular size for this jaw size would be between 104 and 107 mm (McNamara table). Through the analysis of hand and wrist radiographs, the patient was in juvenile growth spurt phase, with initial capping of the phalanges mesial, distal and proximal (Figure 2).

The initial treatment goal was to reposition the jaw, to verticalise the upper incisors and aligning the lower incisors. For this, we opted for the use of orthopedic aids Klammt (Figure 3).

Figure 3. Initial profile; orthopaedic apparatus of Klammt;.

Once the patient was in a positive growth phase after a year of use of the device, we obtained a favorable result where the mandible was repositioned with the aid device (Figure 4).

Figure 4. The final profile.

There was an improvement in the profile curvature as seen in (Figure 4). And the upper incisors were upright, improving in the anteroposterior direction (Figure 5).

Figure 5. Final smile.

The apparatus was kept another year in the position, serving as a deterrent, and then for another six months

while we waited for the exchange of teeth to finish with braces. Finally, we were told a cephalometric and panoramic X-ray to final evaluation (Figure 6).

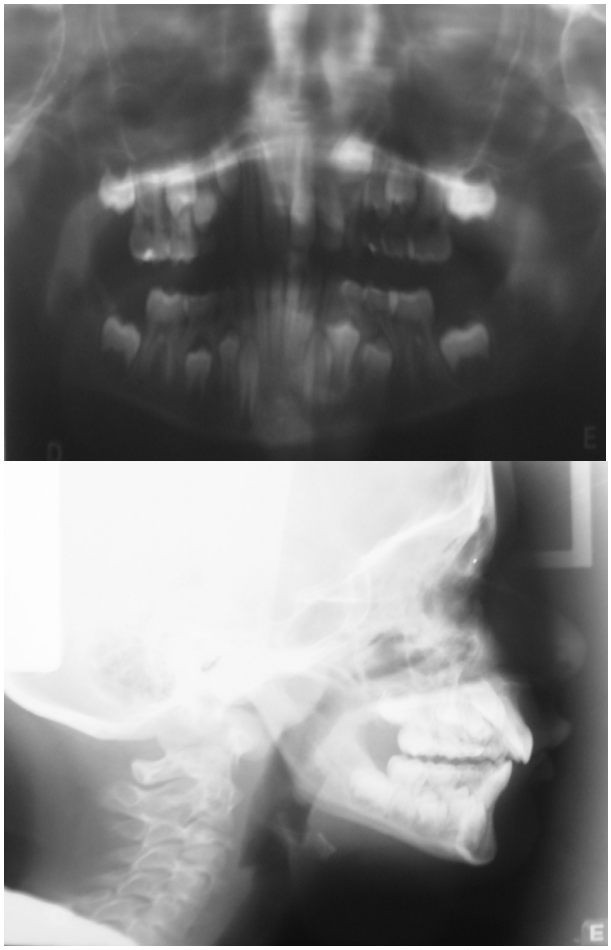

Figure 6. Radiography and panoramic x-rays of the face at the end of treatment.

3. DISCUSSION

This paper presented results similar to studies in which, too, was subject to the anterior mandible positioning or the increase in the anterior mandible growth promoted by mandibular advancement with the activator device[5,8,12].

The Activator Elastic Open Klammt, according to some studies, provided the previous position of the jaw. Mandibular dimensions measured by the total mandibular length (CoGn), mandibular body length (GoGn) and the branch height (CoGo) showed significant differences between patients who underwent treatment with Klammt compared with patients submitted to non-intervention[7,8,9,10,11].

The data from our study showed that the Class II individuals not treated had a lower increase in total mandibular length, lower increase in mandibular body length and smaller increase in the height of the mandibular branch arising from the natural growth compared to those treated with the activator Klammt[7,8].

4. CONCLUSION

The elastic open activator Klammt is a functional appliance used as a good option for the treatment of malocclusion of class II division 1 during the growth phase of the patient. This device interacts with the tongue filling the basic requirements of a muscle system and thus enhances the development of oral structures, promoting change in the jaw position. We conclude that it is beneficial to use this device since the indications are respected, especially in relation to the time when you perform the treatment and level of cooperation.

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ORAL HEMANGIOMA – APPROACH OF A CLINICAL CASE AND TREATMENT

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ABSTRACT

The hemangioma is a benign neoplasia, with accented proliferation of blood vessels reflecting on their clinical characteristics, revealing a volumetric increase of blue-purple color. It is noteworthy, in dental practice, the treatment of this pathological process with ethanolamine oleate 5 % and distilled water in the ratio 1:3, being applied 0,3ml in the lesion with a surgical maneuver of scleroderma, every fifteen days, for twelve sessions. Each application was observed a remarkable gradual regression, on the amount applied, with total remission of hemangioma at 12 drug application.

KEYWORDS: Hemangioma, vascular injury, scleroderma, ethanolamineoleate.

1. INTRODUCTION

Hemangioma is a lesion where there is a moderate to intense proliferation of blood vessels characterizing al benign neoplasms 1, considering that this pathological process endothelium retains its original shape and does not assume a biological role for uncontrolled growth[2,3].

Clinically, can present with red color, reddish purple and blue-red[2.4] and these are their most typical feature. Variable mode can be a lesion at the level of the tissue as well as in the form of a tissue growth assuming a liquid collection[2], both aspects may have jagged edges and variable extensions[3,4] and are located anywhere in the body[3], and may also be associated lymphatic vessels where they will have a demonstration lymphohistiocytic hemangioma[5].

The prognosis is usually favorable to the patient, but depending on the extent and location can result in copious bleeding[6,7,8,9], physical defects and even death [10,11,12,13].

This lesion has been framed more markedly in women[7,14,15] in Caucasians 1,7,14 and in childhood and may be continued in the wake of years it may change its size [2,11].

The approach of this clinical case, it emphasizes the existence of the hemangioma and its position in the dental practice; also the actual existence of a favorable prognosis using scleroderma maneuver with the drug monoethanolamine oleate 5%.

2. CASE REPORT

Patients, female, 33, leucoderma, married, clerk, living in a city in the northwest of the state of Paraná; she was admitted to the Dental Clinic of the Faculty Inga being sent for stomatologic evaluation due to its complaint.

In anamnesis it was learned of his complaint, "*It bugs me for 21 years*". For aesthetic, social issues and for fear of causing any injury during chewing looked for the resolution of their problem this time, not finding treatment with healthcare professionals. The patient attributed the lesion to a volleyball game where the ball hit his mouth at age 12, appeared and was growing gradually coming in the reported extensions. Blood pressure measurement was 110/60 mmHg, and historical survey of health and family, there was no information relevant.

Figure 1. Location of hemangioma.

In the clinical examination, the lesion showed a volume increase, in the lower right lip considering the middle line, extended a third of the lip to the corner of

the mouth towards the gutter area to the second premolar lower right, about: 2.5 x 1.5 x 0.75 cm, in its greatest clinical dimensions of bluish purple color, with defined boundaries and flaccid consistency (Figure 1).

After the clinical examination and made vitro pressure to follow a protocol for pigment source of lesion, and considering the signs almost pathognomonic, was diagnosed lesions compatible with hemangioma.

For treatment, it was decided to scleroderma with the sclerosing agent monoethanolamine oleate 5%, as ethamolin® commercially found in vials of 2 mL (Figure 2).

Figure 2. Material used in scleroderma.

After laboratory tests, panoramic radiography, blood count, blood sugar and coagulation did not require surgery following the following protocol: antisepsis of the operative field with PVP-I aqueous solution, anesthesia terminal infiltrative perilesional in a slightly deep tissue plan, with mepivacaine (hydrochloride of mepivacaine with epinephrine) using short needle. Association ethamolin® 1 mL and 3 mL distilled water in a metal tank with a 1 ml insulin syringe to aspirate 1.0 mL of the drug dilution, and the same was applied 0.3 mL at the center and the ends of lesion quadrants. It became careful to perform the injection of the solution at a deeper level, avoiding possible necrosis if applied superficially [6,8,16,17]. During the procedure it was noted minor bleeding, which was stalled easily under light pressure with gauze.

Figure 3. Resolution of the hemangioma.

The patient reported no discomfort. Had been informed that in the postoperative period could have painful symptoms, being prescribed nimesulide 100 mg, 1 tablet of 12/12 hours.

Twelve applications were performed, always one with intervals of fifteen days. In any session there was pain or burning in the trans and postoperative, contradicting other reports[8,9,16,17,18].

At every return, there was a noticeable regression gradually on the amount applied, with total remission of hemangioma with 12th applying the product (Figure 3), aesthetic and functional results satisfactory.

3. DISCUSSION

The hemangioma is more particularly considered when the patient commits its aesthetics. 16,18,19,20. In this case it added to discomfort for fear of chewing suffer trauma and even the patient's report was the fear of playing with their children and the same to injure due to any shock by contact.

The patient attaches the beginning of the hemangioma to the trauma suffered while playing volleyball. However, one should consider that the shock could have exacerbated the evolution of the lesion; it could already have it located on the labial mucosa into the gutter area. This place, which would run from casual viewing.

It became careful in using the resource diascopy to rule out an injury caused by blackish pigmentation because it could be an injury to pigment source along with hemangioma[11,21,22,23,24].

Due its vascular origin, 1.22 surrounded himself with care in relation to laboratory tests: coagulogram, bleeding time (1:41 min: sec); clotting time (6:50 min: sec); tourniquet test (negative); clot retraction (retractable); platelet aggregation time (PAT), whose examination of the patient was 13.3 seconds; prothrombin activity (100.00%); patient relationship/ control (1.07); thromboplastin time - KPTT, patient time (28.5 seconds); relation (0.83); and platelets (225,000 / mm³).

The application of ethanolamine oleate 5% even when applying only 0.3 mL was used for diluting a liquid amount of 4 mL, the proportion 1:3 mL of the drug and distilled water[25,26], 1.0 mL was aspirated and this maneuver being to facilitate the handling of the application of 0.3 mL with a insulin syringe. The volume used in the application proved to be enough for the regression of the lesion treated, 2.5 x 1.5 x 0.75 cm. In hemangiomas[6,21,26] with larger extensions, it is possible not feasible the application of the sclerosing agent ethamolin therefore have to be used larger amounts of the drug, leading to a consequent toxicity[27].

What was reasoned on the hemangioma's predilection regarding the extent and location of the tumor[3,4,6,26], sex[7,14,15,2,11] age, ethnicity[1,7,14], its complications[6, 7,8,10,11], their prognosis and treatment[6,17,26,28] is corroborated with

the literature.

4. CONCLUSION

In a careful analysis it can be concluded need of treatment of patients with oral hemangioma, especially lips, due to aesthetic reasons and for prevention of injuries in the future regions in which is located.

Noteworthy is the fact that the patient stay for two decades in seeking treatment and without its realization, which leads to deduce the non-valuation of dental surgeons in the diagnosis and treatment of hemangiomas.

Emphasize the existing simple operation in treatment with the chemical scleroderma as well as the effectiveness of the results in curing the tumor, always taking precautions to avoid over-application of the drug because of toxicity, do not use in pregnant by the teratogenic effect and for obvious reasons , the bearer of blood dyscrasias. The pre, intra and post-operative has been shown always satisfactory, both when considering the surgeon to maneuver the patient's receptiveness.

As a treatment option worth to make use of ethanolamine oleate 5% to surgical excision, due to location and size of the tumor, which could result in a scar defect in addition to increased bleeding risk, although not commercialized so routine in pharmacies.

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