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SMILE ANALYSIS: A NARRATIVE REVIEW OF THE LITERATURE

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Abstract: Aesthetic dysfunctions have gained increasing attention from research and appropriate treatment choices for each case, aiming to balance aesthetics and health through scientific investigation of the methods and techniques used, thus guaranteeing effective results without health risks. Therefore, through a literature review, the objective of this work is to present the aesthetics of the smile, with a prevalence of facial and dental measures considered aesthetically ideal. And, it has as specific objectives: to analyze how the analysis of the smile is developed; to identify the bibliographic basis of smile analysis in aesthetic dentistry; and to investigate dentofacial deformities and the adoption of dental procedures for a harmonious smile. It was concluded that it is important for the dental professional to analyze the patient's main complaint so that, together with the patient's psychological, physical and emotional analysis, the best possible treatment can be indicated.
Keywords: smile, facial lines, proportion, harmony and aesthetics.

INTRODUCTION

The human smile, a seemingly simple and universally recognized gesture, hides a world of complexity and meaning. Over the centuries, it has been the object of study, fascination and speculation in various areas of human knowledge. However, only in recent decades has science been able to unlock the secrets behind this seemingly ephemeral phenomenon. Smile analysis has become a flourishing interdisciplinary research area, involving diverse disciplines such as psychology, neuroscience, physiology, sociology and certainly dentistry.

Aesthetic dysfunctions have gained increasing attention in research and the choice of appropriate treatment for each case, aiming to balance aesthetics and health through scientific investigation of the methods and techniques used, thus ensuring effective results without health risks. (SERRA, et. al, 2012). A growing number of patients want not only a physiologically and mechanically correct final appearance, but mainly an aesthetically pleasing one. Immersed in an image enhancement routine, with several self-portraits posted on social media, the relevance of face and smile harmony increased considerably in the execution of restorative and prosthetic works. Thinking about how these subjects pose for their cameras and the need to show themselves on the network, to be observed and judged, is to try to understand how relationships are established in the current situation. Social networks are spaces of subjectivities, in which users socialize dynamically with the possibility of reinventing themselves. They create themselves as they want to be seen, transform themselves as they see fit. The way this subject represents himself is directly linked to the expectations of those who are part of his network.

Aesthetics deals with the sensitive faculties related to the beauty and harmony of shapes and colors. For the dental professional, aesthetics seeks beauty through treatments to correct specific problems (GOLDSTEIN, 2000). Thus, dentistry seeks to provide solutions that establish morphophysiological corrections of dentofacial elements in order to achieve the ideal aesthetic standard desired by patients, provided that the structural changes imply positively in the effectiveness of the process (RUFFENACHT, 1990).

Studies have been carried out to assess the prevalence of known patterns of orofacial symmetry 10,11,15,20. Dentofacial aesthetic principles, such as face shape and height, lip analysis, smile zone, gingival aesthetics, axial inclination of anterior teeth, midline position, have been recurrently reviewed and observed 5. For these analyzes to be carried

out, points and lines are traced over frontal photographs of the face and smile in order to create a schematic view of the analyzed regions. vertical lines such as: facial midline determined by the glabella and philtrum points; wing of the nose-canine line, has helped in the perception of facial symmetry 21. Horizontal lines such as: hairline, eyebrows, interpupillary, commissural, occlusal plane, wing of the nose and chin provide the squaring of the facial thirds. However, there is no study in the literature that is capable of determining whether these measures, considered "ideal", are directly related both to a real self-perception of smile aesthetic harmony and the perception by dentists.

Therefore, through a literature review, the objective of this work is to present the aesthetics of the smile, with a prevalence of facial and dental measures considered aesthetically ideal. And, it has the following specific objectives: detailing how the smile is analyzed; identify the bibliographic basis of the perception of smile aesthetics in dentistry; to investigate the impact of dentofacial deformities on the harmony of the smile and adoption of dental procedures to obtain a balanced set of face and smile.

THEORETICAL FRAMEWORK

SMILE ANALYSIS

The relationship of the teeth with the lips determines the degree of attractiveness of the smile, and the lips are analyzed in the sagittal plane and with little reference to the aesthetic line of the smile. A smile considered aesthetic is recognized as harmonious and the act of smiling is a process that does not depend only on the correct positioning of the teeth, but also on the anatomy of the labial muscles [52].

For Hulsey [46], the smile is one of the main tools for the transmission of emotion, and a symmetrical smile with well-positioned teeth aligned in the arch provides harmonic beauty. Thus, the analysis of the face during the smile allows the evaluation of the alignment of the dental and facial midlines, the predominant musculature, the center of the smile and the gingival display, determining its degree of attractiveness.

Thus, smile analysis is an important step in dental treatment, and in frontal analysis there is greater emphasis on horizontal aspects, represented by the six lines of the smile [56].

In reference to horizontal lines, Câmara [41] mentions the line of the upper lip and the line of the lower lip, which together with the dental and gingival lines, form the set of the six horizontal lines of the smile. This smile analysis approach seeks to understand and evaluate different aesthetic and harmonic aspects related to tooth and lip exposure during a smile. It was initially developed by Dr David Sarver, a renowned orthodontist and researcher in the field of facial aesthetics. The six smile lines are divided into three horizontal lines and three vertical lines, each related to a specific element of the smile. Let's explore each of them:

Horizontal lines:

1. Smile line: is the imaginary line that follows the contour of the upper edges of the anterior teeth during a smile. A harmonious smile line is one that follows a smooth curve, following the natural shape of the lips and teeth.
2. Vestibular line: line that represents the outer contour of the lips during a smile. A pleasing buccal line is one that follows a smooth curve, without excessive tension or retraction of the lips, resulting in a more natural smile.
3. Incisal line: line that connects the incisal edges of the maxillary anterior teeth during a smile. A harmonic incisal line is one that follows a smooth and continuous curvature, following the smile line and the

buccal line.

Vertical Lines:

1. Interpupillary line: imaginary line that passes through the center of the pupils of the eyes. The interpupillary line is used as a reference to position the smile in relation to the face, ensuring harmony between the facial elements and the smile.

2. Zygomatic line: line that follows the natural curvature of the cheekbone. A well-balanced zygomatic line is one that follows the shape of the lips and teeth during a smile, contributing to overall facial harmony.

3. Lip commissure line: line that connects the labial commissures during a smile. A balanced lip commissure line is one that follows a smooth curve, without pronounced deviations, resulting in a symmetrical and attractive smile.

The analysis of the six lines of the smile helps in the evaluation of the aesthetic planning. This approach considers the harmony between teeth, lips and facial elements, allowing for a more balanced and natural smile. By analyzing each of the lines, professionals can create an aesthetically pleasing smile that is in line with the individual characteristics of each patient.

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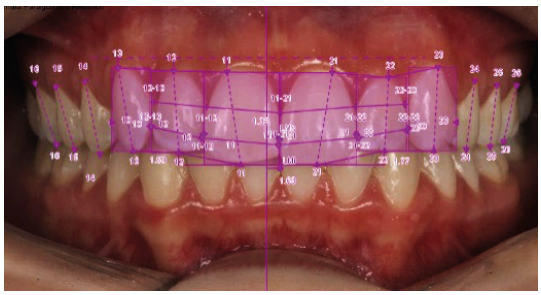

FIGURE 1 – dental analysis

Camera [41] highlights the vertical references from the diagram of dental aesthetic references created to ensure a better visualization of the upper anterior teeth, in order to give us an exact notion of the positioning of the teeth in relation to the gums and lips.

The gingival line is composed of the zeniths of the canines, lateral incisors, and maxillary central incisors. The position of the zeniths is ideal when the maxillary canines are higher than the central incisors and the cervical line has a convex appearance in relation to the occlusal plane. [41]

The zeniths are the highest points of the gingival margins around the anterior teeth in both the maxilla and mandible. The ideal gingival line is generally smooth, following a continuous and harmonious curve.

Below we will describe some of the most common variations of the gum line:

1. Straight Gingival Line: It is a straight and level gingival line, which follows a uniform horizontal outline in relation to the anterior teeth. This variation is considered one of the most ideal and harmonious forms of the gum line.

2. Slightly Sloped Gingival Line: In this variation, the gingival line has a slight slope, following a smooth and subtle curve. This inclination can be seen in some individuals and is still considered aesthetically acceptable.

3. Stepped Gingival Line: In this variation, the gingival line has small steps or gaps between the anterior teeth. These steps may occur due to differences in the height of interdental contact points or the shape of individual teeth.

4. Asymmetric Gingival Line: Some people have asymmetries in the gingival line, where one side of the smile may have a different gingival contour than the other. These asymmetries can be subtle or more pronounced and must be evaluated in relation to overall facial harmony.

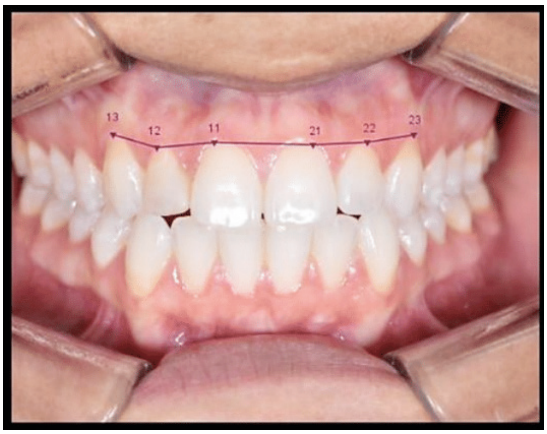

FIGURE 2 - gingival line

The papillary line is composed of the tips of the gingival papillae that lie between maxillary lateral incisors and canines and maxillary lateral incisors and central incisors. The papilla of the upper central incisors fills half of these teeth, when under normal conditions. [55] The ideal papillary line is characterized by a smooth, symmetrical gingival contour, following a continuous curve between the anterior teeth. The papillary gingiva fills the space between the teeth, forming small triangles of gingival tissue that fit together harmoniously. Some factors can influence the shape and position of the papillary line, such as the gingival anatomy, the shape of the teeth, the positioning of the teeth and periodontal health.

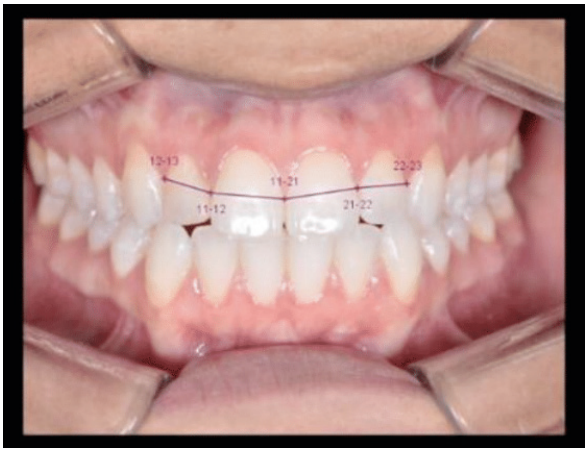

FIGURE 3 - papillary line

The incisal line is a visual reference used in dentistry to assess the position of the incisal edges of the upper anterior teeth during a smile. It describes the imaginary line that connects the incisal edges of the teeth, forming a smooth curve that follows the natural contour of the anterior teeth.

The length of the upper canines and upper central incisors hairs correspond to the length of the upper canines and lateral incisors 0.5 or 1.00 mm smaller, they are considered a "seagull smile"

For the ideal design of the incisal contour, the step between the central and lateral incisors must be 1.0 to 1.5 mm for females and 0.5 to 1.00 mm for males. [45]

A smile with a "deep plate" smile line may indicate a sharp or arched curve in the smile line, where the incisal edges of the anterior teeth appear to curve outward sharply, resembling a deep plate shape.

The expression "flat plate smile line" is used to describe a type of smile line curvature in which the incisal edges of the anterior teeth form a smoother curve, without a pronounced curvature. In this case, the curvature of the smile line is less pronounced and flatter, resembling the shape of a flat plate. A shallow smile line can result in a smile with a straighter or more horizontal appearance compared to a more arched smile line. It is an aesthetic variation that can occur naturally in some people or be influenced by the anatomy of teeth and facial structures.

FIGURE 4 - incisal line

In turn, the set formed by the upper and lower lip provides labial unveiling, ideally that the curvature of the upper incisal faces is parallel to the lower lip and these same faces can be spaced apart or slightly touching the lower lip. [41]

With regard to the gingival margin, it must be harmonious, and the first step towards a correct diagnosis is the classification of the gingival level in terms of gender, age and periodontal health. Thus, the establishment of the etiology of the gummy smile is considered fundamental, relating to the vertical growth of the maxilla, resulting in the reduction in length and excessive contraction of the upper lip [44.]

Hwang [57] established the diagnosis of gummy smile with a minimally invasive treatment modality using botulinum toxin. Tumenas et al [58] report that in the search for a perfect smile, many patients go to dental offices and Minimal Invasion in aesthetics also includes the use of adhesive techniques, which are possible as long as there is good alignment of the teeth. It is then possible to use light-cured composite resins to perform restorative procedures for closing diastemas, dental reanatomizations, in case of agenesis or conoid lateral incisors or any contour deficit in the natural shape of the tooth, with little or no wear [58]

Another possible technique is the use of laminated ceramic veneers. Through the adhesive application of ceramic laminates on the buccal surface of the teeth, it is possible to aesthetically recover anterior teeth in a situation of compromise, however, it may be required to perform a greater wear of the buccal surface so that this lamina can be accommodated without generating overcontouring. close to the gingival margin and having a satisfactory mechanical resistance.

The authors warn that whenever there is a dental replacement or restoration there is an increase in the wear of that tooth, this will generate a dental wear in the future that will result in the weakening of that tooth.

Thus, Tumenas et al [58] warn that dentistry professionals must initially propose to their patients the use of more conservative treatment alternatives, which can guarantee greater safety for the tooth and less wear, thus preserving the natural tooth structure.

Dong [47] mentions another way of classifying the smile, with the analysis of the degree of exposure of the gummy smile in three categories, namely high, medium and low. In the high smile, the total exposure of the crowns and a continuous band of the gingival tissue is visible, being considered unaesthetic and techniques recommended for correction of the gingival smile. In the average smile, the crowns of the maxillary anterior teeth and the interdental papillae are mostly or entirely visible.

Feu et. al [43] consider the ideal height of the gingival margin of the lateral incisors to be 1 millimeter below the central incisors and canines. Patterns that include lateral incisor margins above the central incisor and canine margins are considered unaesthetic.

FIGURE 5 – pink aesthetics x white aesthetics

THE SMILE IN COSMETIC DENTISTRY

The concept of aesthetics is very broad. In cosmetic dentistry, the harmonious smile of its patients is increasingly sought. In order to have the composition of a smile considered harmonious, there must be balance and symmetry of the teeth, lips and gums. For periodontal aesthetic excellence to occur, a detailed assessment of the facts that interfere with the symmetry of the elements that make up the smile is necessary. The analysis of these characteristics is fundamental for choosing the best periodontal therapeutic approach [49].

According to Andreazza et al [36], (gingival risk factors occur) when the smile line only allows visualization of the teeth, obtaining an aesthetic result is easier than when the smile shows, in addition to the teeth, a lot of gum (gingival smile). Gingiva thickness, amount of keratinized gingiva, papillae, embrasures, color, texture and soft tissue contour directly influence the aesthetic result. Finding the right balance between pink aesthetics (gingival tissue) and white aesthetics (teeth) can be the main key in developing an assertive dental plan.

A normal smile line is considered when it allows total exposure of the upper incisors with a maximum of 2mm of exposed gingiva. When the incisors are partially exposed, the smile is considered low, and if there is more than 2mm of exposed gingiva, the smile line is considered high [51].

And, the risk factors for the aesthetic excellence of the whole set increase when tooth(s) are lost, after all, in this occurrence, bone tissue resorption is common, consequently altering the contour of the gingival margin. A shallow vestibule is often the result of severe bone resorption, making the aesthetic result and cleaning of prosthetic parts difficult. [36]

Obtaining esthetic improvement in implant-supported restorations has the possibility of favoring the use of guided bone regeneration and connective tissue grafting. Even so, the apical and occlusal position of the implants must be considered [54].

Thus, the health and appearance of the gingival tissues are paramount for aesthetics, because when it is used as a framework for a restoration, its role is expanded, given the lack of appropriate white aesthetics without matching pink aesthetics. As a result, when a restoration impacts on color, the perception of tissue health may be impaired [54]. Under normal conditions, healthy gingival tissue is pink in color and firmly attached to the underlying layers [53].

DENTOFACIAL DEFORMITIES

For patients with dentofacial skeletal deformities, priority must be given to diagnosing the face and its alterations, identifying the location and severity of the problem according to sex, age and ethnicity [56]. These patients, in general, are individuals who are very dissatisfied with their physical appearance, as well as their occlusion.

According to Zambonato [32], in many cases, dental problems are also accompanied by skeletal problems, thus altering the patient's maxillomandibular relationship.

Zambonato [32] states that there may be problems of spatial imbalance of the facial bone structures and that this condition may occur in association with malocclusions such as open bite and long face, among others. With regard to open bite, it is characterized by the lack of contact between the anterior teeth, this form causes a space between the upper and lower incisor teeth, which causes the perception that the patient is unable to close the mouth.

According to Zambonato [32] there may be several components that cause a patient to develop a long face, among them: Maxillary

vertical excess (maxilla with height above average and disproportionate); vertical excess of the ramus of the mandible or very open gonial angle (mandible large vertically and turning counterclockwise). In these open bite situations, the increase in space between the incisors ends up bringing about an increase in the lower third of the face.

It also exists and in a very common form, varying in intensity and facial asymmetry. Zambonato [32] states that this deformity can only be perceived when the patient is evaluated in a frontal view, in which case an abnormality in the contour of the facial structures of each hemiface can be perceived, with a dissonance between the right and left sides.

Orozco-Varo et al [24,] explain that the proportion of each individual tooth within the anterior maxillary region is the percentage obtained by dividing its width by its length and with that, many authors have tried to establish a defined figure for this proportion, in order to facilitate the aesthetic restoration of a smile.

Therefore, if the patient's maxilla and/or mandible are positioned asymmetrically, in situations where there is rotation in relation to the vertical plane, this can be called laterognathism.

Bernabé et. al., [34] point that dentofacial deformities alter the development of the jaws, resulting in facial disharmonies and changes in dental occlusion, which may be caused by excessive mandibular growth.

Reis [33] in his study sought to determine the morphological, facial and dental parameters for indication of treatment in patients with dentotofacial deformities. They obtained measurements of the numerical facial analysis variables of the profile from photographs of the facial profile and the inclination of the upper and lower incisors. Among the variables that were associated with surgical orthodontic treatment were facial aesthetics and upper incisor inclination.

Bastos Junior et. Al., [35] report that patients with severe dentofacial deformities, with a severe long face pattern, have a high degree of impairment of facial aesthetics, which can affect their appearance and social life.

Didactically, in dentistry, the dental midline determines the symmetry of the dental hemiarches and can be represented by an imaginary line that divides the central incisors from each other, both in the upper and lower arches. A pleasant dentofacial appearance is obtained when the dental midline is located in the midface center [42.]

Asymmetric dental midline correction can be approached through different treatments depending on the underlying cause. These treatments may include the use of orthodontic appliances, such as brackets or clear aligners, to reposition the teeth, or in more complex cases, it may be necessary to perform oral rehabilitation procedures, such as dental restorations or prostheses.

The minimal deviation from the dental midline refers to a slight or subtle asymmetry in the position of the upper and lower teeth in relation to the facial midline. This means that the anterior teeth may be slightly displaced to one side or the other in relation to the m-line and ideal facial day.

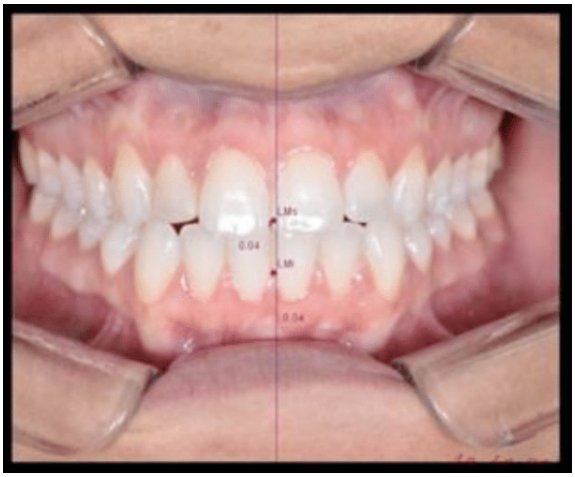

FIGURE 5 - midline

Smile shape and lip lines play a significant role in smile esthetics and appearance. The shape of the smile refers to curvature or the general shape of the lips and teeth during tooth exposure. There are different smile shapes, and each person can have a unique shape that is determined by the anatomy of the lips, dental arch and facial musculature. Some of the most common smile shapes include:

- Straight Smile: The lips and teeth present a straight line when smiling, without a pronounced curvature.
- Arched Smile: The lips and teeth form a smooth curve, following an arched line. It is a smile shape that is considered aesthetically pleasing and harmonious.
- Gingival smile: It is characterized by excessive exposure of the gum during the smile. In these cases, a greater amount of gum is visible above the teeth.
- Asymmetrical smile: An asymmetrical smile features a discrepancy between the right and left side of the smile. It may be the result of asymmetries in the position of the lips, teeth or smile line.

Lip Lines:

Lip lines are visual references that describe the outline of the lips during a smile. They are used to assess the symmetry and harmony of the lips in relation to the teeth and the smile as a whole. Some examples of lip lines include:

- Upper Lip Line: It is the line that follows the contour of the upper lip during the smile. Ideally, this line must be smooth and symmetrical, following the shape of the upper teeth.
- Lower Lip Line: It is the line that follows the contour of the lower lip during the smile. Like the upper lip line, it too must be smooth and symmetrical to the lower teeth.

The analysis of the smile shape and lip lines is performed by dental professionals during the aesthetic evaluation of the smile. This analysis considers the harmony between lips, teeth and facial elements, allowing for a more balanced and natural smile.

It is important to highlight that there is no universally ideal smile shape or lip line, as smile aesthetics are influenced by individual factors and aesthetic preferences. The evaluation and treatment planning must take into account the unique characteristics and desires of each patient, seeking to achieve an aesthetically pleasing smile in harmony with their individual characteristics.

The smile arc is considered ideal when the incisal edges of the upper teeth form an arc that follows the contour of the lower lip, also influencing dento-facial harmony [50].

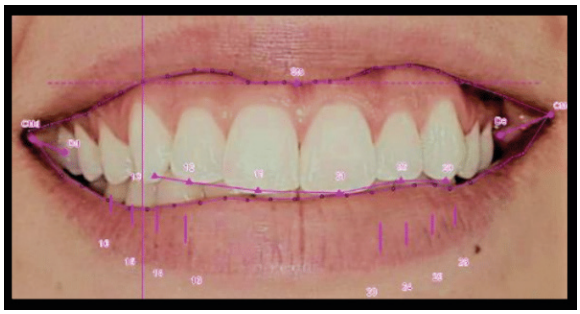

FIGURE 6 – lip lines

A correct dental alignment contributes positively to the harmony and aesthetic balance of the smile. When teeth are rotated or too inclined towards the buccal or palatal side, there is interference in the harmonious set of teeth, causing a negative aesthetic effect on the smile [42]

The shape of the tooth is an aspect that must be established in aesthetics, whether they are square, ovoid or triangular. In addition, the proportion of height x width of the tooth is relevant for the maxillary central incisors, when these are the dominant teeth in the smile. [42].

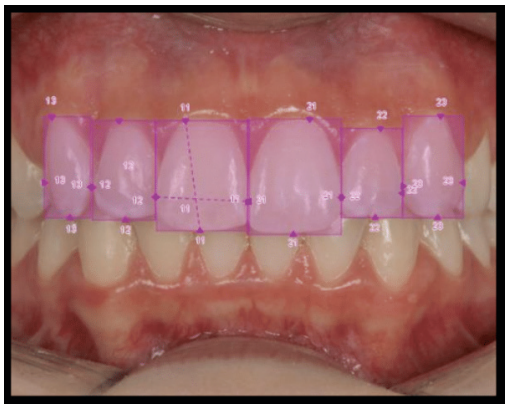

FIGURE 7 – tooth proportion

DENTAL PROCEDURES TO OBTAIN A HARMONIOUS SMILE

The demand for dental procedures has grown more and more, usually in the search for white and well-aligned teeth, to obtain a harmonious smile, mainly because problems with the coloring of dental elements have become more valued.

The teeth play a fundamental role in the analysis of the smile and its general aesthetics. Teeth color can vary from individual to individual, and a pleasant and harmonious color is an important aspect in the perception of dental beauty. When it comes to smile analysis, the color of the teeth is evaluated in relation to the color of the skin, lips, gums and eyes, as well as in relation to the color of adjacent teeth. Harmony between these elements is essential for an aesthetically pleasing smile.

Tooth whitening is a commonly used procedure to improve the color of teeth, making them lighter. Bleaching can be done both in the office dental care or at home, under the supervision of a dental professional.

Tooth whitening can positively affect smile analysis, providing a more youthful - looking smile. It can help eliminate surface stains on teeth caused by factors that come naturally with aging, consumption of pigmented foods and beverages, smoking, and certain medications.

However, it is important to emphasize that tooth whitening must be carried out in an adequate and safe manner, respecting the individual characteristics of each patient. It is essential to assess the need for and feasibility of whitening, taking into consideration, factors such as dental health, initial tooth color, tooth sensitivity and other specific oral conditions.

Furthermore, it is important to remember that the color of the teeth must be kept in harmony with the facial and lip features in order to obtain a balanced and natural smile.

Smile analysis has been improved by the integration of 3D technology, digital planning software and orthodontics. 3D technology allows the capture of detailed images and three-dimensional models of the mouth, teeth and facial structures, providing a more accurate view of dental and facial features. Digital planning software allows a detailed analysis of the smile, including shape, proportions, alignment and symmetry, in addition to realistic predictions of treatment results. Orthodontics uses these technologies to improve the planning and execution of orthodontic treatments, allowing the visualization and simulation of tooth movements. The combination of these tools results in more accurate analysis, personalized planning and more effective communication with patients, providing a satisfactory experience and more predictable esthetic results.

These advanced tools make it possible to assess not only the shape, alignment and color of the teeth, but also the position and contour of the gingival tissues. Through the detailed analysis of the smile, it is It is possible to identify gingival asymmetries, excessive or insufficient exposure of the gingiva during a smile, and propose personalized treatments to harmonize pink and white aesthetics. The use of digital planning software and virtual simulation make it possible to visualize the

aesthetic results of the treatment in advance, taking into account not only the appearance of the teeth, but also the harmony between the gingival and dental tissues. This way, it is possible to achieve a global aesthetic balance, where pink and white aesthetics complement each other, resulting in a harmonious and naturally attractive smile.

Several techniques have been proposed to correct gummy smile, including surgical treatments such as Lefort I osteotomy, clinical crown lengthening, gingivoplasty, lip repositioning, among others. Although these procedures have satisfactory long-term results, with high success rates, it is important to highlight that they are expensive, invasive, complex and irreversible [37].

It is necessary to consider the etiology involved when choosing the treatment, since several factors may be associated with gummy smile. Studies included in a review addressed patients with gummy smile caused by hypermotricity of the upper lip elevator muscles, in which the application of botulinum toxin type A (BTA) was successfully indicated. However, it is important to emphasize that gummy smile caused by skeletal maxillary vertical excess or late tooth eruption must ideally be treated with surgical intervention [38].

In cases of drug-induced hyperplasia, in addition to interruption and replacement of drug therapy, surgical treatment may also be indicated, especially in patients with severe fibrotic growths that affect aesthetics and function [39].

Clinical crown lengthening surgery can be performed using two techniques: external bevel gingivectomy, in the apical- incisal direction, and internal bevel technique, in the opposite direction, from incisal to apical. Both involve surgery with a full-thickness flap and may be indicated to remove gingival hyperplasia, among other situations [40]

According to Araújo et al. [40], the main contraindications for performing gingivectomy are inadequate biofilm control, marginal unevenness, inflammatory process, furcation region, disproportion between root and crown, and narrow strip of keratinized gingiva. The gingivoplasty technique must be avoided in cases that would result in excessive exposure of the connective tissue.

While surgical treatments offer long-lasting results, they can also cause pre-operative anxiety and post-operative complications such as pain and delayed healing. Furthermore, they may be rejected by patients seeking less invasive options to meet their aesthetic expectations [59].

The most common non-surgical treatments include orthodontic therapy, lip fillers and application of botulinum toxin type A (BTA). The application of TBA is considered a simple, effective and minimally invasive technique for patients with labial hypermotricity [37].

While surgical procedures offer long-lasting results but require recovery time and carry risks associated with surgery, TBA treatment is a quick, non-invasive, highly effective outpatient procedure. Botulinum toxin treatments are considered effective when gingival exposure is less than 2-3 mm [60].

FINAL CONSIDERATIONS

The study concluded that the search for aesthetics can be done through applications of morphological proportions and organized in golden ratio. It is important that the dental professional analyze the patient's main complaint so that, together with the patient's psychological, physical and emotional analysis, the best possible treatment can be indicated.

Among the factors observed during the bibliographical study for the harmony of the smile include the correction of defects in the gingival morphology, in the format and dental positioning and harmonization of the hard and

soft tissues around the smile either through the use of minimally invasive techniques or bloody surgeries such as orthognathic surgery. Regardless of the solution found, the current great advance is in the possibility of predicting the prognosis through the strategic use of planning tools that digital dentistry and 3D studies of the topography of the smile have provided.

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