COSMETIC RECONSTRUCTION AND RESTORATION WITH COMPOSITE RESIN USING THE DIRECT TECHNIQUE FOR REANATOMIZATION OF CANINES IN LATERAL INCISORS - CASE REPORT

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ABSTRACT

The concept of beauty in modern society has made people more demanding and detail-oriented, and very challenging for dental surgeons to meet so many aesthetic demands. Teeth with any type of alteration negatively affect harmony, causing individuals to seek solutions to restore naturalness. This quest for perfection has led to the evolution of dental materials, aiming at the most faithful reproduction of the natural. **Objective:** To report a clinical case in which the patient presented bilateral agenesis of the upper lateral incisors, providing an aesthetic solution through recontouring and reanatomization with composite resin of the upper canines, leaving them with a shape similar to the lateral incisors. **Case report:** The patient, DROM, female, attended the UniEVANGÉLICA Dental Clinic with the main complaint that "her smile was different from other people's, and that her canines were more forward, leaving spaces between her teeth." The intraoral clinical examination revealed bilateral absence of the upper lateral incisors. The canines were positioned in place of the missing teeth, leaving the incisal edges quite open. The proposed treatment was to recontour and reanatomize the upper canines into lateral incisors with composite resin, changing the shape and reducing the spaces between the incisal edges. This was followed by wear on the crown of the upper canines and the clinical protocol for composite resin, inserting layers to complement the details of the shape of the lateral incisors. **Conclusions:** The immediate result met the patient's aesthetic expectations, and the use of composite resins demonstrated their versatility in various clinical situations.

Keywords: Anodontia; Dental aesthetics; Composite resins; Self-image.

INTRODUCTION

Restorative dentistry currently plays a significant role in dental aesthetics, which is increasingly demanded by our patients (LIMA, 2019; ABREU, 2020), and encompasses the anatomy, color, and harmony of the teeth with the rest of the face (TORRES DE ARAÚJO, 2019; WALESKA DA SILVA, 2023).

The search for a perfect smile has led individuals to dental offices, while challenging the skills of dental surgeons, who are improving their restorative techniques and knowledge in order to perform cosmetic procedures with excellence (SILVA, 2021; WALESKA DA SILVA, 2023).

Personal appearance is a decisive factor in people's self-esteem and self-confidence and plays an important role in the well-being of individuals (ABREU, 2020; WALESKA DA SILVA, 2023). Teeth, with their particular anatomical shapes and groups, each with their own function, are fundamental to the balance of the stomatognathic system, aesthetics, and phonation (FRANÇA. 2021).

When there is a disruption of harmony, such as changes in color, shape, and size, especially of the anterior teeth (LIMA, 2019; ABREU, 2020), it can compromise the aesthetics of the smile and negatively influence self-esteem and interpersonal relationships (LIMA, 2019; FRANÇA, 2021).

One of the frequent changes that can occur is dental agenesis, an anomaly in number, characterized by the absence of one or more teeth, which can be present in both deciduous and permanent dentition (TORRES DE ARAÚJO, 2019; LIMA, 2019; SILVA, 2021). When agenesis of the upper lateral incisor occurs, due to the strong aesthetic impact, people are motivated enough to seek a solution (TORRES DE ARAÚJO, 2019; FRANÇA, 2021). As a conservative approach, and bringing very favorable aesthetic results, composite resins are a good option for resolving these situations, through the reanatomization of canines to the shape of upper lateral incisors, after wear for re r recontouring (LIMA, 2019; TORRES DE ARAÚJO, 2019; ABREU, 2020; SILVA, 2021).

The reanatomization technique consists of applying layers of composite resin to modify the contours, colors, and ideal anatomical details of the teeth to restore the harmony of the smile (TORRES DE ARAÚJO, 2019; ABREU, 2020).

With the wide range of aesthetic restorative materials available on the market, it is essential that the operator is familiar with the clinical protocols for adhesive systems and composite resins in order to provide individuals with a satisfactory and long-lasting aesthetic result (TORRES DE ARAÚJO, 2019; ABREU, 2020).

Individualized planning is essential for the success of treatment, and professionals need to develop their manual skills and ability to address clinical challenges in order to achieve their goal, which is to bring harmony and aesthetics to the individuals who seek them out (LIMA, 2019).

CASE REPORT

The patient DROM, female, attended the UniEVANGÉLICA Dental Clinic with the main complaint that "her smile was different from other people's, and that her canines were more forward, leaving spaces between her teeth." The intraoral clinical examination revealed the bilateral absence of the upper lateral incisors. The canines were positioned in place of the missing teeth, leaving the incisal edges quite open.

The proposed treatment was to recontour and reanatomize the upper canines into lateral incisors with composite resin, altering the shape and reducing the spaces between the incisal edges, making the canines look similar to the lateral incisors.

The planning phase included impressions to obtain study models, so that diagnostic waxing could be performed later. A silicone guide was molded on the waxed model to assist and speed up the cosmetic recontouring and restorative procedure.

In the clinical session, after selecting the color (A2) and composite resin, teeth 13 and 23 were worn down with a fine truncated cone diamond tip on the

vestibular boss and cusp tip, which are very evident features in the upper canines.

Absolute isolation was used without the use of clamps. The enamel was conditioned with 37% phosphoric acid for 30 seconds, and the dentin for 15 seconds, followed by thorough washing with air/water *spray* for twice the conditioning time. After removing excess moisture, the session was followed by the application of the conventional 2-step Single Bond primer/adhesive (3M/ESPE) in two layers, followed by air drying and light curing of the last layer for 20 seconds.

The silicone guide was positioned to check whether the wear on the canines was sufficient and whether the dimensions were similar to those previously planned in the waxing. We began by placing an increment of Herculite Enamel A2 composite resin (Dentsply/Sirona), followed by Herculite Dentin A2 (Dentsply/Sirona), and complemented with an increment of Filtek Z250 A2 (3M/ESPE), polymerized one by one until the expected result was achieved. The final polymerization was 40 seconds.

The final finishing and polishing were performed in the following session, using fine and extra-fine diamond tips, followed by abrasive rubber tips for composite resin polishing, polishing discs, and finally, a felt disc with Poli I and Poli II (Kota) polishing paste, thus restoring the proper shape and size of the teeth.

CONCLUSIONS

Cosmetic recontouring and reanatomization with composite resin presented satisfactory results, restoring the harmony of the smile and improving the patient's self-image and self-esteem. The procedures described in th s can be predicted by prior planning with diagnostic waxing and a silicone guide.

More conservative techniques should always be preferred, and the use of composite resins offers excellent cost-benefit ratio, achieving excellent results, longevity, and speed of execution.

This treatment provided a harmonious dental relationship in terms of width and height, as well as an appropriate anatomical shape.

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