

CONOID LATERAL INCISORS: AESTHETIC RESOLUTION WITH COMPOSITE RESIN USING THE DIRECT TECHNIQUE - CASE REPORT

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ABSTRACT

The search for an aesthetically harmonious smile is on the rise, and aesthetic restorative treatments can change the shape, color, and texture of teeth, among other things. Direct composite resin restorations have been used conservatively and with excellent results to correct various dental disharmonies, which are the result of patient complaints due to the media bombardment of beauty standards. **Objective:** To report the clinical case of a patient who presented with lateral incisors with altered shape (conoid), leaving her dissatisfied with her appearance. The indication of composite resin restorations for reanatomization of conoid teeth allows for correction of the shape, restoring the natural appearance of the smile. **Case report:** Patient MBC, female, attended the UniEVANGÉLICA Dental Clinic complaining of having "thin front teeth that bother me." On intraoral examination, the presence of conoid-shaped upper lateral incisors was noted. Composite resin restorations using the direct technique were proposed to restore the anatomical shape and recover aesthetic harmony. A silicone guide was used, molded in the diagnostic wax-up, thus maintaining the predictability of the previously sculpted tooth anatomy. **Conclusions:** The shape and size of the lateral incisors were restored with direct composite resin restorations, which provided excellent immediate results and patient satisfaction. The reanatomization procedures were effective in restoring the aesthetics of the teeth with anomalies, providing an aligned smile and improving the patient's self-image and self-esteem.

Keywords: Smile; Self-image; Composite Resins; Dental Aesthetics.

INTRODUCTION

The growing appreciation of an aesthetically pleasing smile has led professionals and patients to increasingly seek treatment alternatives to modify

dental appearance, due to the significant impact of smiling on individuals' self-esteem and well-being (KURESKI, 2018; LOBATO, 2019; RODRIGUES, 2023).

In modern dentistry, great importance is placed on restoring harmony and aesthetics to the teeth, as well as function and phonation (OMEISH, 2022). Changes in tooth morphology, color, and proportions can compromise an individual's psychological state and social interaction (KURESKI, 2018; OLIVEIRA, 2021).

A common situation that affects the beauty of a smile is the presence of conical lateral incisors and consequent diastemas, resulting in a smile that does not meet beauty standards (LOBATO, 2019). This dental development alteration is related to tooth size and shape and is classified as isolated microdontia. It usually affects females more frequently, occurring on both sides of the dental arch, with the upper lateral incisor being the element most affected by this alteration (VERONEZI, 2017; OMEISH, 2022; RODRIGUES, 2023).

With the evolution of adhesive techniques, it is possible to rehabilitate various cases of dental anomalies with less invasive procedures, allowing predictability and longevity of the results obtained, through the use of partial or total veneers with composite resins in the direct technique, which are excellent restorative options (KURESKI, 2018; OLIVEIRA, 2021). To perform these procedures, it is necessary to develop manual skills and train the operator in order to accurately and adequately recreate the color, morphology, and texture of the teeth (KURESKI, 2018; RODRIGUES, 2023).

Direct restorative techniques provide conservative, aesthetic, and functional treatment in a single session (OMEISH, 2022), minimizing the amount of tooth tissue to be removed from a tooth already compromised by enamel alteration. The technique is conservative, low cost, durable, and easy to repair when necessary (VERONEZI, 2017).

CASE REPORT

The patient, MBC, female, is undergoing treatment at the Dental Clinic of the Evangelical University of Goiás-UniEVANGÉLICA. She reported aesthetic complaints

of having "thin front teeth that bother me." The intraoral examination revealed the presence of upper lateral incisors with altered shape and a conical appearance.

The proposed treatment was direct restoration with composite resin to restore the shape of the conical lateral incisors, restoring the natural appearance of the smile. The plan was developed after studying the case, including molding to obtain study models, and then performing diagnostic waxing. A silicone guide was molded on the waxed model to assist and speed up the restoration procedure, as it already included the predictability of the tooth shape.

In the clinical session, after selecting the color and composite resin, modified absolute isolation was placed. The rubber dam already in the young arch was cut with scissors to the extent necessary so that the teeth to be restored were exposed. The edges of the dam were "glued" to the vestibular and palatal inserted gingiva with cyanoacrylate. No clamps were used in the absolute isolation. No wear was performed on the teeth to be reanatomized.

The clinical protocol was followed as follows: conditioning with 37% phosphoric acid for 30 seconds on the enamel, followed by washing for twice the time and drying. The conventional two-step primer/adhesive Single Bond (3M/ESPE) was applied in two layers, followed by air drying and photopolymerization of the last layer for 20 seconds.

The silicone guide was positioned to begin reanatomization of the conical lateral incisors. We began by adapting a layer of Herculite Esmate A2 composite resin (Dentsply/Sirona) for the surface layer, followed by Filtek Z250 A2 (3M/ESPE), polymerized one by one until the desired result was achieved. The final polymerization was 40 seconds.

The final finishing and polishing were performed in the subsequent session using fine and extra-fine diamond tips, followed by abrasive rubber tips for composite resin polishing, abrasive discs in descending order of abrasiveness (), and finally, a felt disc with Diamond R diamond paste (FGM), thus restoring the proper shape and size of the teeth.



CONCLUSIONS

Aesthetics has become an influential factor in society through various means, leading to a relentless pursuit of correcting disharmonies in order to improve individuals' self-esteem and well-being.

The reanatomization procedure was effective in restoring the function and aesthetics of teeth with dental anomalies, providing an aligned and pleasant smile.

The silicone guide made it easier to define the contours of the teeth, speeding up the restorative treatment.

Success was possible due to the correct indication and clinical protocol of composite resins, which are excellent materials for reproducing the shape, size, and color of teeth, while also preserving healthy dental structure. Thus, the success of the treatment was consolidated, restoring the aesthetics and harmony of the smile.

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