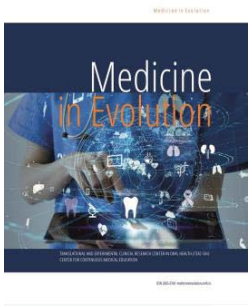
How to perform the stamp technique



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Abstract

Aim and objectives: The role of choosing a direct technique in the posterior side as a stamp or layered has not been widely reported. The intent of the thesis is to gain an understanding of when to perform one technique or another in different classes by looking at the advantages and disadvantages to compare the predictability of the aesthetics results and the biomimetics of the restoration.

Material si methods: The patient, a 23-year-old girl, presented at the private praxis with blackish staining on the teeth in the posterior side and no complaints of discomfort. She needs odontotherapy treatment on the mandible in multiple teeth on the posterior side by using two different techniques stamp and layered.

Results: Precision is needed for the clinical step and high importance must be given to materials that become highly sensitive during handling.

Conclusions: The decision of choosing a technique that have been used depends on the desired aesthetic patients complaint, the time available for the operative steps, and the clinician's experiences with the technique and materials, or even depending on each clinical case, if it is involved just the enamel or enamel/ dentine.

Keywords: precision, aesthetics, technique, material.

INTRODUCTION

In the last 20/25 years, it changes the way how to treat dental decay, especially for the needs of the patients even for the aesthetics and toxicity demands that other material could give. For this, it was developed new material and method for the aesthetic restoration in the posterior side that is in continuous evolution. We can restore small or wide lesions with adhesive techniques. (1)

Some posterior teeth can present a lesion with intact anatomical morphology which allows us to perform a stamp technique, and other posterior teeth can present a deeper lesion more than 2 mm, so more complex because of the location and we need to perform a layered technique. The use of correct layering techniques allows us to give an aesthetic appearance that is to be first of all functionally correct. (2)

This research would consist of a general section that outlines the technique and their effectiveness in improving the treatment's prognosis, followed by an experimental area, demonstrated by the picture the comparison of two techniques when to use one another with the following advantages and disadvantages. (3)

MATERIALS AND METHODS

The patient, a 23-year-old girl, presented at the private praxis with blackish staining on the teeth in the posterior side and no complaints of discomfort. She needs odontotherapy treatment on the mandible in multiple teeth on the posterior side by using two different techniques stamp and layered. (Figure 1)

Figure 1. Initial situation (4.6)

The "stamp technique" is a new technique that reproduces both function and aesthetics. This technique is done by making an occlusal impression that records the occlusal morphology of posterior teeth before the preparation of the cavity is performed. After that is obtained an index, is then pushed against the last composite layer before light curing to achieve a positive reproduction of the anatomical tooth morphology. The only situation in which this technique is made is when the tooth has perfect anatomical features. This means that the stamp technique could restore hidden caries not really visible.

The isolation of the operating field is done by the checking of occlusal contacts, interproximal contacts with floss, anesthesia, and application of the rubber dam (Figure.2,3,4,5,). The cavity preparation is made of cylindrical or round burs, a medium-grained diamond with a high handpiece (Figure.6), after the removal of carious lesion dentin

with round burs in carbide tungsten with a low handpiece and manually with a small curette, and the edge finishing with chamfering-regularization of the enamel is made with flame or cylindrical Arkansas burs with low handpiece.

Figure 2. Isolation

Figure 3. Impression with fluid composite and light curing the composite

Figure 4. Composite impression index

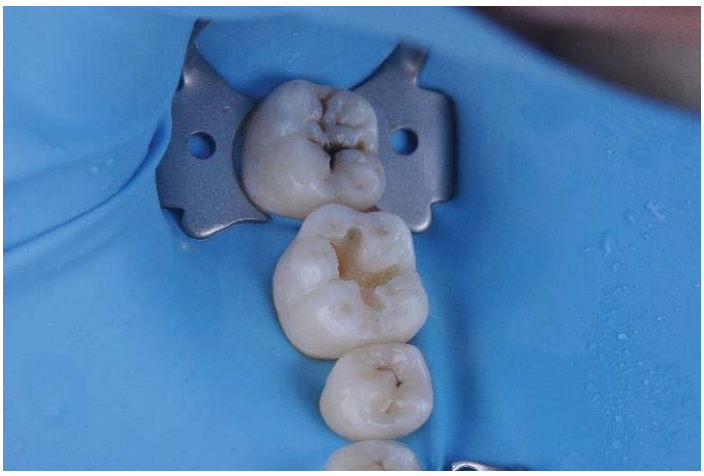

Figure 5. Cavity preparation

Figure 6. 1st layer of composite (light cured)

Figure 7. Final aspect

A single coat of vaseline which acts as a separating agent, was applied into the occlusal surface with an applicator brush tip, then a small amount of flowable composite material (Estelite Sigma Quick Flow, Tokuyama dental) was placed on the occlusal surface of the affected tooth, and an applicator brush tip was immersed into this composite, and the composite was cured.

Furthermore, cavity preparation was done, and selective etching rinse and dry then bonding was performed, a bit of flowable composite material was inserted as a liner (Estelite Bulk Fill Flow, Tokuyama dental).

On the last increment, a Teflon band is added, then the composite impression is placed over it, gently not to snap. It is forced lightly over the Teflon, making out that it is perfectly set until it is extracted. First, any extra content is removed, then the Teflon band.

The use of teflon is a good choice as it does not expire, is cheap, nonadhesive, and simple to discover. For the reproduction of the anatomical morphology of tooth the composite (Estelite Asteria OcE, Tokuyama dental) was light cured after the placement of the occlusal stamp on the tooth surface, and color pigmentation was used in the grooves (Estelite Color ocher syringe, Tokuyama dental), in the end, polishing was performed.

RESULTS

If the stamp technique is achieved, the total time is reduced and the post-restoration, finishing time is reduced due to the almost immediately desirable successful cusp-fossa relation.

This is useful for occupied clinicians and assists with improving their standing among the patients.

At that point, the level of porosities present in the last rebuilding is significantly diminished, this is since the stamp technique applies tension on the composite, consequently diminishing the development of air bubbles of the last layer of composite.

Precision is needed for the clinical step and high importance must be given to materials that become highly sensitive during handling.

Result may be jeopardized if the clinician does not control each layer.

DISCUSSIONS

Primary carious lesions in posterior teeth may have an unaffected morphology even if there is an inadequate DEJ.

The dentin beneath the enamel is destroyed when there is a bit or no damage to the enamel. In order to access the necrotized dentin, enough healthy enamel must be removed.

As a result, the normal anatomy of the tooth that existed previously is lost. The idea of using a composite stamp technique exists for this purpose.(4)

The detection of dental decay has decreased in the recent years due to the contribuiting factors as the use of fluorides, mostly regarding carious lesions on the surfaces.

However, the widespread use of fluoridated agents indicates that the morphological element in the production of dental decays has shifted, leading to an increase in the occurrence of caries lesions where the enamel remains intact.(5)

The stamp technique is a suitable option for the reconstructions of the occlusal aspect in the posterior side. The use of composite material allows for the construction of perfect cusp profiles and morphology, which achieve occlusal contact and the operator time.(6)

Dentists are active in the treatment of patients' occlusions as well as regular repair procedures.

Premature contacts may alter the occlusal location, leading to malocclusion and altering the movement of the mandible.(7)

One downside is that this technique takes ability to be done correctly.

CONCLUSIONS

The decision of choosing a technique that have been used depends on the desired aesthetic patients complaint, the time available for the operative steps, and the clinician’s

experiences with the technique and materials, or even depending on each clinical case, if it is involved just the enamel or enamel/dentine.

Although the technique is sustained by scientific evidence, there seems to be a trend toward simplification of steps, benefits being less treatment time and reduced polymerization contraction stress.

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