12 DMG

Just fill. Constic - The self-etching and self-adhesive filling material

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The desire to simplify work steps during restorative treatment is greater than ever before, with today's wide selection of bonding systems with complicated work processes to some extent. Particularly in the case of small class I restorations, as well as fissure sealing and lining,, which can be performed relatively quickly, preparatory steps such as etching and bonding protract the working time. At the same time, they increase the number of possible sources of error since, if certain work steps are neglected, the durability of the restoration can be drastically reduced.

Many dentists would like to have fewer work steps required, in order to be able to work more safely and focus primarily on the restoration. This can be achieved through the use of self-etching and self-adhesive synthetic materials.

Constic is the self-etching and self-adhesive flowable composite from DMG, which combines etching, bonding and filling in one step and features superior adhesion to enamel and dentine along with good aesthetics.

Case Study

In the case shown, a small, inadequate class I restoration on tooth 17 can be seen (Abb. 1).

Procedure

After preparing the cavity, it is initially recommended to clean the tooth, remove any debris using water spray and blow it dry (Abb. 2). Then an approximately 0.5 mm thick layer of Constic flowable composite is applied to the cavity using the Luer-Lock-Tip and massaged in for 25 seconds using the brush (Abb. 3 + 4). Thereafter any excess should be removed (Abb. 5). Then the layer is light-cured using a polymerization lamp for 20 seconds (Abb. 6).

The actual restoration is then performed. For the restoration, the material is applied in layers that are a maximum of 2 mm thick (Abb. 7). The low-viscosity and uniform consistency of Constic ensures that the restoration has no trapped air or marginal gaps. This is facilitated by the fact that no additional bonding materials are used. Each layer is light-cured for 20 seconds (Abb. 8).

Using a dental probe, a high-quality aesthetic fissure surface can be achieved prior to final curing (Abb. 9). Apart from the Luer-Lock-Tips and the brush, which are included in the set, few additional modeling instruments are required. Thus sterilization costs and instrument wear are kept to a minimum. The cured restoration is then checked for overhangs, which are removed using a scaler. (Abb. 10 + 11 + 12)

Conclusion

Constic as a self-etching and self-adhesive flowable composite stands out due to its uncomplicated application with simultaneously high-quality aesthetic results. Since Constic is available in many different shades, a restoration that is individually characterized can be prepared for each tooth. The range includes shades A1, A2, A3, A3.5, B1, as well as opaquewhite. Since the work steps of etching, bonding and filling are combined into one step, the dentist is able to have a shortened working time on the one hand and also stress-free work on the other hand.

In addition, considerably fewer instruments are required, which improves both the work flow and also the dentist's concentration on his/her own work and thus has a positive effect on the final results.

Steps such as etching, which represent a certain degree of patient risk, are combined with filling into one work step and this increases safety for the dentist. In addition, this ensures that no intermediate step is forgotten. Due to its versatile applicability - Constic is suitable for lining and also for small class I restorations, as well as fissure sealing - the size of the

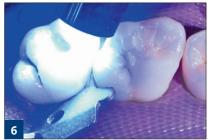














inventory improves, while purchasing costs for other systems are minimized at the same time.

The radiopacity of the material also ensures identification of the restoration by dentists in the future.

Finally, it can be said that Constic enables work to be performed in a more relaxed fashion, while decreasing the amount of work and achieving an aesthetically challenging and functionally high-quality result.

Figures

- 1: Baseline situation: Occlusal amalgam restoration in tooth 17
- 2: Depiction of the defect of the class I cavity
- 3: Application of Constic using the Luer-Lock-Tip
- 4: Massaging in Constic with a small brush
- 5: Removing the excess using a foam pellet
- 6: Light polymerization of the first layer
- 7: Application of another layer of Constic
- 8: Light polymerization of the second layer
- 9: Result after contouring the restoration using a probe
- 10: Polishing the restoration using a Super-Greenie
- 11: Constic restoration after finishing and polishing
- 12: Checking the occlusion

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November 2013











