

# Clinical Case Report

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# Clinpro<sup>™</sup> Sealant, Vanish<sup>™</sup> 5% Sodium Fluoride White Varnish, and Clinpro<sup>™</sup> Tooth Crème (3M) as a Preventive Clinical Strategy

#### Introduction

Pit and fissure sealants have been known to be effective in caries prevention, especially in posterior teeth. While the use of pit and fissure sealants is a common procedure in many offices, the placement itself can be problematic, especially on pediatric patients. Sealant materials are typically tooth colored, making it challenging to see during application and leading to more necessary adjustment and longer appointment times.

## **Description**

Clinpro™ Sealant (3M) is a low viscosity sealant material which is pink during placement and changes to a natural white shade after curing. The sealant flows easily into pits and fissures, contains and releases fluoride, and bonds to enamel. A smart color-change feature provides the clinician visual feedback so they can be confident in their placement. The ability to see where the sealant material is flowing not only saves time during application, but also eliminates the need for occlusal adjustment making this an ideal product for pediatric appointments where patient management can be difficult. Scotchbond™ Universal Etchant (3M) is slightly viscous allowing for controlled placement and reducing the chances of contact with soft tissues, and the Elipar™ Deep Cure-S Curing Light (3M) offers speed and confidence with its faster and deeper cure also lending itself to use in pediatric appointments.

#### Clinical Case

An 11-year-old patient presented for a routine oral examination during a prophylaxis appointment. During the clinical exam, non-carious, deep pit and fissures were noted in the first molars (Figure 1). Pit and fissure sealants were recommended as the choice of treatment and the parents requested the treatment be completed that day, and all materials were available. (Figure 2). The patient is in the early stages of orthodontic treatment, and will require a preventive in-office and at-home regimen.



Figure 1. Pre-operative view of tooth No.3.



Figure 2. Tray set-up.

#### **Clinical Procedure**



Figure 3. Application of Scotchbond Universal Etchant.

The tooth was isolated with a rubber dam. The surfaces to be sealed were etched for 15 seconds with *Scotchbond Universal Etchant* (Figure 3). The tooth was rinsed and air-dried thoroughly.



Figure 4. Application of *Clinpro Sealant* Into the pit and fissures.

Clinpro Sealant was slowly applied with a syringe tip applicator into the pits and fissures (Figure 4). The sealant is pink in color when applied to the tooth surface (prior to light curing) to ensure proper visualization of placement. Please note: to eliminate bubbles, use the syringe tip or an explorer to manipulate the sealant material.



Figure 5. Light cure with Elipar DeepCure-S (20 seconds).



Figure 6. Post-operative view of final restoration.

The sealed tooth was then light cured for 20 seconds using the *Elipar DeepCure-S Curing Light* (Figure 5). When *Clinpro Sealant* is set, it cures to an off white color (no longer pink). An explorer was used to check for voids and to confirm marginal adaption. The occlusion was checked; no adjustments were needed on the final restoration (Figure 6).

## Follow-up Care



Follow-up treatment for this patient was application of *Vanish* ™ 5% *Sodium Fluoride White Varnish* every six months due to pending orthodontic treatment. The patient was given *Clinpro* ™ *Tooth Crème* (3M) to be used twice per day in place of his usual toothpaste. *Clinpro Tooth Crème* is an excellent choice for children who do not need a prescription strength fluoride. In this case, the patient will have future bracket placement and *Clinpro Tooth Crème* will assist in the prevention of white spots. Six month recall was recommended until bracket placement, at which time oral hygiene and home care strategies can be reassessed.



# Summary

The use of *Clinpro Sealant* is a great option for dental sealants on pediatric patients, especially when time is of the essence. With this system, the smart color-change technology allows the clinician to visualize placement, saving time and making patient management less challenging. The viscosity of *Scotchbond Universal Etchant* is ideal as it allows the material to penetrate deep into the pits and fissures, ensuring good bond strength. Additionally, the sealant material flows easily into grooves and contains and releases fluoride.