Griptab — Make Life Stress-free When Placing Inlays, Onlays, Crowns and Veneers

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One of the major challenges in placing indirect aesthetic restorations is handling and controlling the restoration during preparation for bonding, loading with bonding material, and accurate placement of the restoration. A new product from Triodent, developers of the V3 Ring system for managing contact points, has been released to make the placement of indirect restorations a simple, stress-free procedure. One of the many stressors in dentistry is handling small objects like inlays, onlays and veneers, with the risk of dropping a restoration, or accidentally orienting it the wrong way around. With the increasing adoption of all-ceramic restorations and associated bonding protocols, including the use of hydrofluoric acid and silane, accurate and safe handling of the restorations can reduce the time and stress involved in bonding procedures and consequently increase productivity.

An investigation of the many techniques currently used by dentists reveals most have shortcomings. Most of the adhesive devices are seriously challenged by the presence of silane during the pre-bonding phase and can lead to uncontrolled separation of the carrying device, most often at the most inappropriate moment. Devices like the wax-tipped Sticky-stic and the adhesive-tipped OptraStix are seriously challenged by silane and can release at the most inappropriate moment. During the preparation of the restoration for bonding, a small object has to be handled while applying hydrofluoric acid and then silane, with the restoration having to be placed in an ultrasonic cleaner after HF etching.

Several products have come to market trying to deal with these issues. None have been completely successful in achieving the goals of reliable adhesion, ease of placement and the ability to passively release the restoration, and pick it up again during preparation for bonding, and then be able to passively release the restoration again once it has been located on the tooth. Some products work adequately with veneers but don’t work with irregularly shaped inlays, onlays and crowns. The new Griptab system (Fig 1-3) has universal application to all restoration types including gold, reliable adhesion to the restoration, ease of pick-up and release, and easy and clean removal after placing the restoration.

APPLICATION OF THE GRIP TAB TO A RESTORATION

Prior to the patient’s arrival, a staff member attaches a GRIP TAB to each restoration. The appropriate sized tab is selected and twisted off the rack with a pair of Pin Tweezers. A small amount of adhesive is applied to the tab and is located onto the desired surface of the restoration and released. (Fig 4) The adhesive is then light cured for 20-40 sec, depending on light intensity. (Fig 5) The restoration can now be picked up and released as often as is desired during etching and silanation. (Fig 6) The tab will not release when the restoration is placed in an ultrasonic cleaner.
RISK-FREE RESTORATION CEMENTATION

Following preparation cleanup (Fig 7) the crown can be tried-in to check fit prior to bonding preparation. (Fig 8) The restoration is then loaded with the desired adhesive by the assistant and handed to the dentist. The restoration is then placed on the tooth with no risk of incorrectly oriented or accidentally dropping the restoration during transfer from assistant to dentist or when placing it onto the tooth. (Fig 9) The pin tweezers are then passively released from the Griptab without risk of accidentally displacing the restoration (Fig 10). With all other placement techniques, apart from using fingers, the dentist is faced with a handle stuck onto the restoration that has to be removed to allow for removal of excess cement. At this point, there is a serious risk of accidentally displacing the restoration, with the concurrent risk of air entrapment under the restoration or on a margin. Clean-up can then proceed with the Griptab still in place and once the restoration has been bonded, the Griptab can be simply removed by sliding a thin metal blade under the adhesive, with no risk of damaging the restoration or any residue being left on the surface. (Fig 10)

The Griptab system facilitates stress-free adhesive cementation of multiple restorations (Fig 12) where time is of the essence and the risk of dropping or mis-positioning a crown can have significant consequences with adhesive beginning to polymerize before the mishap has been corrected. By attaching a pair of pin tweezers to each restoration, they can then all be etched and silanated at the same time by holding all the tweezers in one hand, (Fig 13) and then loaded with adhesive by the assistant and handed to the dentist in the prescribed order, with no risk of dropping the crown or having it handed to the dentist in the incorrect orientation. (Fig 14) The increase in cementation efficiency and reduction in potential problems is an eye opener once the extended use of the system has been grasped. (Fig 15, 16)
GRIPTABS — VENEERS AND MULTIPLE CROWN KIT

The cementation of veneers and multiple is also fraught with handling challenges. It is challenging to handle thin veneers during shade-matching, try-in and final cementation. With the GRIPTAB, there is no risk of accidentally dropping the veneers or getting in a mess with cement or try-in paste all over the dentist’s fingers. The assistant has total control of the veneers during etching and silanation and final loading of the chosen adhesive. The development of a veneer system tray has further reduced the risk of accidentally try-

![Figure 7](image7.jpg) Placement of a Triodent Wave Wedge facilitates cleanup with low pressure air-abrasion by protecting the papilla. Left in place, the Wave Wedge also reduces the risk of a large cement overhang following cementation.

![Figure 8](image8.jpg) The GRIPTAB facilitates try-in by being able to be released once the restoration is located and can then be picked back up once margin integrity has been confirmed.

![Figure 9](image9.jpg) Cementation with the crown being located with the aid of the GRIPTAB and pin tweezers.

![Figure 10](image10.jpg) Passive release of the pin tweezers without the risk of accidental displacement of the crown.

![Figure 11](image11.jpg) Removal of the GRIPTAB once cementation clean-up has been completed. The GRIPTAB adhesive peels off the crown without any residue.

![Figure 12](image12.jpg) Multiple E4D e.max CAD/CAM restoration case preloaded with GRIPTABS prior to patient arrival.

![Figure 13](image13.jpg) Concurrent etching of multiple restorations.

![Figure 14](image14.jpg) Teeth isolated with an Isolite, air-abraded and prepared for bonding and cementation.

![Figure 15](image15.jpg) Crowns concurrently bonded. Passive release of the GRIPTABS from the pin tweezers allows for immediate clean-up without having to waste time trying to remove them to gain good access and running the risk of the bonding resins polymerizing before clean-up has been completed.

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The Griptabs are attached parallel to and near the incisal edge of the veneers, (Fig 18) prior to the cementation appointment and can be left in place until the completion of cementation and will facilitate cementation during all phases of the procedure. The veneers are retained in individual pin tweezers and placed in the appropriate position on the veneer system tray. By locating the Griptab near the incisal edge, they do not interfere with try-in cement shade selection. (Fig 19) Once the correct shade of cement has been selected, it is very easy to pick up all the veneers off the teeth and wipe out the try-in paste without the risk of dropping the veneers. If they need to be ultrasonically cleaned to remove all traces of try-in paste, the Griptabs will remain attached and the veneers can be picked up again with the pin tweezers. Following loading of the chosen shade of resin cement, the veneer can be accurately placed on the tooth with no messy fingers and no risk of accidentally displacing the veneer when the pin tweezers are disengaged. The veneers can be light tacked into position with the Griptab still in place and then removed prior to final cleanup and polymerization of the cement.

The advent of the Griptab system has revolutionized and simplified the placement of modern adhesively bonded restorations by providing secure grip in the presence of silane and simple and predictable passive pick up and release of the restoration as many times as is required during the procedure. They are very useful in managing any small object that has to be introduced into the mouth. Their applications are only limited by the dentist’s imagination.

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