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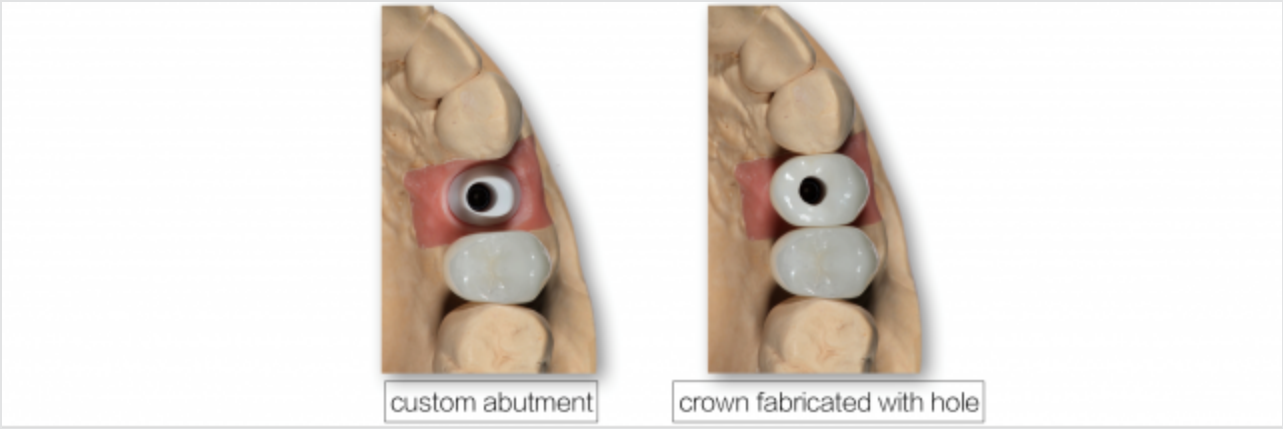
Considerations For Screw-Retained Single Implant Restorations: Part II

By Robert Winter (/spear-review/author/bob-winter/) on April 11, 2018 | (/bookmarks/bookmark/39297) SHARE

The current trend in restoring implants is to screw retain the final restoration. In part two of this series, we will discuss some of the additional disadvantages of this type of restoration and ways to alleviate some of the challenges faced when using this option.



In the first part of this article, disadvantages discussed included challenges related to improper angulation of the implant (https://www.speareducation.com/spear-review/category/implants), resultant lack of adequate thickness of the restorative material and esthetic (/spear-review/2013/08/evaluating-facial-esthetics-facial-profile) management of the access hole.

Another disadvantage or complication is the ease of checking the interdental contacts when trying in the restoration. It is difficult to determine which contact might be tight. If both conta Live Chat challenge to determine if the restoration is completely seated on the implant.

Radiographs are not of significant value when there are internal connections because there is no visual definitive seating of the components. If an interproximal contact is determined to be too light, the normal process would be to bake additional ceramic, contour and polish to achieve the desired fit. This is not possible if the TiBase has been bonded into the restoration. It cannot be removed.

The two options to fix the problem are to make a new restoration, which can be a significant expense for parts and labor, or micro air abrade with 50-micron aluminum oxide, etch, and bond composite resin.

Modifying the esthetic outcome of one-piece screw restorations can also have significant limitations. If a change is required that requires the restoration be re-baked in a ceramic oven, such as to add surface stains to enhance the color match, the components cannot be separated so the entire restoration must be remade.

To alleviate the above challenges, a restorative option would be to fabricate the screw-retained restoration in two parts. The abutment and crown are fabricated in the normal fashion, except a hole is made in the lingual or occlusal aspect of the crown. There is typically some additional expense associated with this process because there are two components rather than a single unit produced.

During the try-in of the restoration, the abutment is screwed into position, and the crown is tried on the abutment as if it were a natural tooth. The interproximal and occlusal contacts are checked in a routine manner. The esthetic aspects are confirmed. If any alterations are required, they can be completed in a normal fashion. The restoration can be cemented intraorally to assure proper positioning on the abutment. The restoration is then unscrewed and removed from the mouth to remove the excess cement.

If necessary, polishing of the transition from the crown to the abutment can be easily accomplished. The abutment and crown are then screwed into the implant as one piece. This is the option I choose if I wish to use a screw-retained restoration anteriorly, and is my strong preference posteriorly.

It is imperative the technician and dentist confirm that when the crown is temporarily connected to the abutment on the master cast, it has a path of draw for removal!

Custom healing abutments or provisionals are highly recommended to establish the gingival contour and soft tissue support necessary to achieve the optimal esthetic and hygienic outcome. Following this protocol will simplify the restorative aspects of implant dentistry.

(Click this link to read more dentistry articles by Dr. Bob Winter (https://www.speareducation.com/spear-review/author/bob-winter/).)

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This Spear Online e-book compiles clinical articles that offer practical ways of addressing screw- and cement-retained implant restorations in your practice.