CONVENTIONAL TECHNIQUES WITH NEW TECHNOLOGIES

***GingiGEL**, Gel-coated braided retraction cord for clean and visible prepared tooth margins prior to impression making*

Advances in conventional impression with dental materials or the use of a digital impression technique have enabled efficient and precision transfer of a tooth preparation. Clinically, it is important to obtain a highly accurate impression of a preparation. However, it is ESSENTIAL to obtain visible and clean margins with dried gingival sulcus to ensure marginal fit of a laboratory-fabricated restoration.

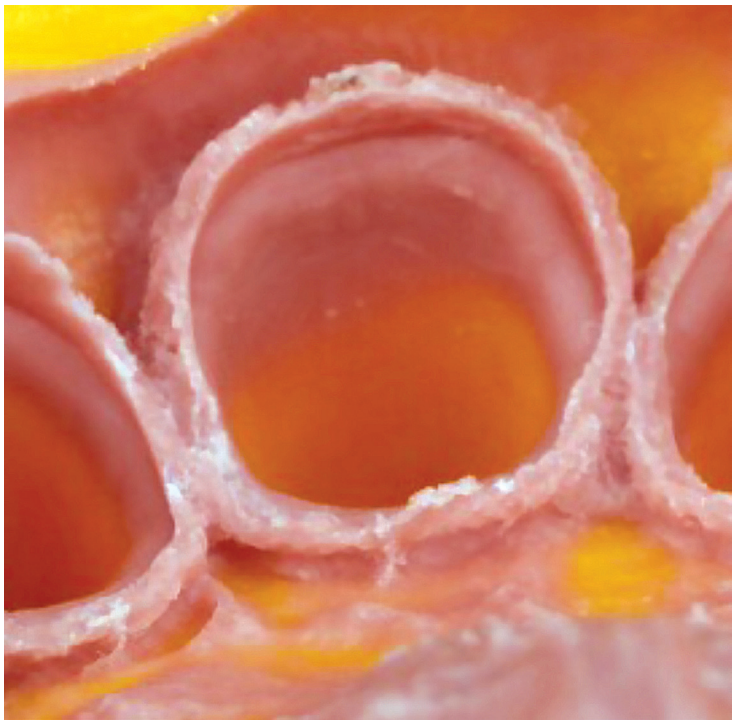
Subgingival preparations are routinely carried out by dentists for indirect restorative treatments such as veneers, crowns, and onlays. Therefore, the management of gingival tissues and fluids are critical in order to make the prepared tooth margins visible and accessible prior to the impression taking.

Among the several gingival retraction agents that are commonly available in the market, we have obtained successful outcomes after the placement of 20% buffered aluminum chloride gel retraction cord (GingiGEL, Kerr). While its cords provide mechanical sulcus displacement, the astringents and hemostatic agents provide the chemical capacity to retract the tissues and constrict the blood flow. Although GingiGEL comes with a retraction cord, I often choose different brands of cords, adapting it for each clinical case and then, I immerse the chosen cord into the gel of GingiGEL.

Over my 28-year experience using the gel of GingiGEL, it showed excellent results regarding the marginal impression with optimal marginal fit. Chemically impregnated cords can be very useful prior to the impression. Along with my experience with this material, it is important to note that standardization and planning of the clinical steps prior to any procedure plays an important role on the final result of the impression technique chosen (conventional or digital), and later on the indirect restoration long-term stability. Keeping an appropriate environment, such as storing the materials under a controlled temperature, as well as decreasing the room temperature prior to the impression making seems to be a crucial step.

In addition, it is known that retraction agents containing astringents are characterized by a relatively high level of acidity with cytotoxic potential for gingival margin tissues.[1,2] Some studies also have shown concern regarding their chemical interference with the dentin surface bonding procedure during cementation.[3] Therefore, it is advisable to place gingival retractions agents into the sulcus and remove it as soon as the impression is obtained, and rinse it thoroughly before the cementation procedure.

New trends in three-dimensional (3D) digital impression seem to be the future, however, the use of conventional protocols prior to the impression making like clean and dried surfaces, and visible margins are the key of a successful impression. "You can only make the impression of what you can see!".



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