Problem solving with Versacryl

Or how you can have your full denture and keep that tooth too!

The 360° Versacryl retention point (VRP - Versacryl Gasket Clasp)

The physics of rigid materials are established facts that we cannot divorce ourselves from. If the physics remain constant and we introduce a material into the equation which allows us to get around these physical constraints, should we still persist with conventional techniques?

The patient presents with one tooth standing. Whether it is in the upper or lower arch, we are faced with the same set of challenges: fabricating a denture around the solitary tooth. Up until now the solution has been to either inform the patient the denture will not be stable around that tooth or he/she will need to have that tooth extracted to have stability. Your practical suggestions are rejected by the patient's emotional needs.

A solitary tooth combined with rigid acrylic does not allow for many alternatives. Basically it is an issue related to relief, around that solitary tooth which compromises the peripheral and / or palatal seal. Relief also reduces bracing effect.

Clasping that tooth with round S/S or gold wire which has less than ten per cent (10%) of it's diameter contacting the tooth surface, combined with flexibility along it's total length. Round wire also has no taper or rigidity or effect for that matter.

Cast clasps fair a little better. If constructed precisely, a cast clasp has taper and increased rigidity. A flat fitting surface against the tooth improves bracing and generally has a closer adaptation to the tooth than a round wire clasp. But in this case not very effective. Which all add up to a lack of stability and retention. A process of trial and error leading to frustration. A compromising set of circumstances to say the least.

That is up until now.

Versacryl is an extremely useful material which lends its self perfectly to innovative techniques and applications. The paradigm shifts from relief to coverage, turning conventional techniques and applications on their head.

This is but one of the cases available free of charge on the "Improved Denture Design" educational DVD set from Ultimate Dental. For further details call Ultimate Dental on 1800-636-801.

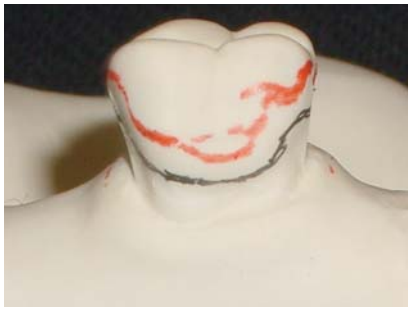

Figure 1. The molar is marked with a red surveying pencil. The dark pencil line indicates the depth below the survey line that the VERSACRYL will engage (360° and 1mm deep).

Figure 2. Leave space between the denture teeth and the abutment tooth, so the VERSACRYL will have enough thickness and be able to compress into the undercut.

Figure 3. Buccal wax up. Keep the wax as high as possible toward the occlusal so as to improve bracing and support.

Figure 4. After boiling out and separating you can run your indicating lines again (these lines will be picked up by the VERSACRYL and will aid in trimming). Trim from gingival margin to black pencil line.

Figure 5. Mix VERSACRYL liquid and powder to achieve a creamy consistency, place right around the molar and close the flask. Leave for 5 minutes then open the flask and trim any excess if you have to. Let set for 30-45 minutes. Mix heat/cure acrylic. When acrylic is ready to pack, prime the VERSACRYL with a little hardener liquid. Put a little heat/cure acrylic around the VERSACRYL, then add acrylic to the other half of your flask, close and press.

Figure 6. Top view 360° VERSACRYL Retention Point (VRP) (Gasket Clasp).