## Enigmas and conundrums

Part 4 – Acrylic processing & finishing

By Jordan Nikoloski

he hard work has already been done. Processing this case should be, and will be straight forward. We have a bulky ridge (fresh extractions) to process onto. Gum fit will be the most aesthetically pleasing result, a flange can be added when resorption necessitates, at a later stage.

Only a minimal amount of tooth acrylic is required between the teeth and backings to achieve a most adequate retention. We will achieve a **chemical bond** of acrylic to the teeth and **mechanical retention** between the acrylic and the backings. I will be using Langs<sup>®</sup> Jet tooth coloured acrylic in shade A3.5 and Sledgehammer<sup>®</sup>

self cure monomer to achieve a compositelike hardness and finish.

In cases where heavy grinding is necessary, there can be concerns maintaining original shade. One **solution** is opaque on the metal work, although beneficial in some cases, it requires technique-sensitive procedures, expensive materials and of course time. This solution can also be counter-productive, robbing us of valuable space and mechanical retention.

Another **solution** is gold plating the metal surface, which takes up a fraction of a micron, but who has a gold plater in their lab?! These masking elements are to help



achieve a higher value or warmer chroma as opposed to untreated metalwork where a lower value can result (grey appearance).

In this case we won't need to concern ourselves with treating the metal surface. **Choice of teeth** is the major consideration. Premium quality teeth, with good density of colour, hardness and a softer acrylic core for excellent chemical bonding is vital to achieve a result which instills confidence and pride. For your next case **choose Enigma**<sup>®</sup> teeth and *judge for yourself*.



Labial view. Teeth are placed onto the model using the key and waxed into position.



Remove key and boil off teeth, model and casting. Roughen slightly around the necks of teeth and areas for bonding with acrylic.



Occlusal contacts are also waxed, note finishing lines.



Langs<sup>®</sup> Jet tooth acrylic and Sledgehammer<sup>®</sup> self cure monomer for composite like hardness and finish, pours well too!



Wax up is keyed with Ultimate Lab Putty exposing the palatal aspect of 12, 13 for easy pouring of acrylic. The key is cut square note accurate fit.



Place teeth into the key mix acrylic and carefully pour over teeth, paying particular attention not to incorporate air bubbles.



Using the same mixture of acrylic, gently pour in and around the backings and place the key along with the teeth onto the model.



As finished. Labial view.



Fill the saddle and then pour acrylic into the 24 saddle. Place rubber band on keys and put into the hydroflask at  $45-50^{\circ}$ C for 10-15 mins at 2 bar.



As finished. Palatal view, note clean finishing margins.



As processed straight out of the hydroflask.



Note clean finishing margins on inferior surface of the appliance.

## About the author

Jordan Nikoloski is product development and technical manager at Ultimate Dental Supplies.

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