Revitalizing denture esthetics

Recreating natural-looking gum tissue using GC Gradia Gum Shades tissue colored composite system.

By Jim Collis, CDT. Information provided by GC.

Following are steps for creating the esthetics of natural gingiva in an existing denture using GC Gradia Gum Shades tissue shade composite system. This new generation of tissue-colored, light-curable micro-composites allows the technologist to naturalize a denture base or the base of an existing denture to give it the color, texture, translucency, and veining of natural gum tissue. Because the composites are applied to the already processed denture base in the arbor-banded state, the technologist has total visual control over the application of the stain materials. The micro-composites adhere to the acrylic denture base by using a composite primer. The user-friendly staining process allows the technologist to simply wipe off the stains before curing if the desired staining result is not achieved and reapply. The line of gum shades is offered in three composite viscosities: a liquid, a gel, and a paste. These alternatives afford the user an almost unlimited combination of colors and textures and even allow the anatomy of the denture to be enhanced in terms of root structure, tissue connectors, and rugae. Gum fibers also are available to imitate the natural blood vessels in the oral cavity.

01 Start with the denture in the sandpaper state. Clean it in an ultrasonic cleaner, then steam clean or brush with clean water. Dry completely (Fig. A).

02 Apply a thin coat of composite primer to the arbor-banded denture (Fig. B) and cure for one minute in the Labolight curing unit or two minutes in the Triad unit with the table rotating. Check the primer to ensure it is completely dry. (Fig. C)

Apply G22 or G24 Gum Paste with a spatula for form root structure and highlight the GM35 with contrast. (Fig. D)

Apply a mixture of GM36, ICO Clear, and GF71 gum fibers to the denture borders. (Fig. E)

Apply an air barrier for the final cure. (Fig. F)

Remove the air barrier coating by placing the denture in an ultrasonic cleaner. (Fig. G)

The old denture (left) and revitalized denture (right). (Fig. H)

The revitalized denture in the mouth. (Fig. I)

Light-curable micro-composite for reproducing gingival tissues.

Features
• Indicated for reproducing gingival tissues for implant superstructures, crowns, bridges, and full and partial dentures
• Strong, durable material in a variety of red shades
• Three composite viscosities to reproduce different gingival tissues

GC America Inc.
www.gcamerica.com

3737 West 127th St.
Alsip, IL 60803
800-323-3386

Select XXX

Fig. A Clean the denture in an ultrasonic cleaner, steam clean, then dry.

Fig. B Apply a thin coat of composite primer to the arbor-banded denture.

Fig. C Place GM35 around the gingival to create a blanching effect.

Fig. D Apply G22 or G24 Gum Paste with a spatula for form root structure and highlight the GM35 with contrast.

Fig. E Apply a mixture of GM36, ICO Clear, and GF71 gum fibers to the denture borders.

Fig. F Apply an air barrier for the final cure.

Fig. G Remove the air barrier coating by placing the denture in an ultrasonic cleaner.

Fig. H The old denture (left) and revitalized denture (right).

Fig. I The revitalized denture in the mouth.
03 Place GM35 around the gingival to create a blanching effect (Fig. C). Note: The gum modifiers have a honey-like consistency to optimize control of the material. It is best to apply it to one or two teeth at a time, cure for 10 seconds to harden and continue around the arch to the next one or two teeth.

04 Apply G22 or G24 gum Paste with a spatula to form more root structure and to highlight the GM35 with contrast (Fig. D). Note: Because gum pastes are a thicker consistency, it is possible to apply them to more than two teeth at a time if needed.

05 Contour the gum paste with a small, stiff, flat brush. A drop of primer on the brush helps in blending the surfaces. Cure for 10 seconds.

06 Apply a mixture of GM36, ICO Clear, and GF71 gum fibers to the borders of the denture in between the roots and around the G22 or G24 application to highlight the root structure (Fig. E). Note: Primer can be added to the mixture to create a thinner consistency.

07 Apply air barrier for the final cure (Fig. F). Coat all areas where composite was applied. Cure three minutes in the Labolight or four minutes in the Triad curing unit with the table rotating.

08 After curing, place the denture in the ultrasonic cleaner to remove the air barrier coating. Pumice and polish just like acrylic (Fig. G). Stipping can be added after high shining. Lightly pumice with a brush and high shine again.

09 Fig. H shows the old denture on the left in comparison to a revitalized denture on the right.

10 Fig. I shows the revitalized denture in the mouth.